

**A DISTANCE EDUCATION MANAGEMENT MODEL FOR THE
POLYTECHNIC OF NAMIBIA**

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**DISSERTATION SUBMITTED FOR THE DEGREE DOCTOR IN
PUBLIC AND DEVELOPMENT MANAGEMENT AT THE
UNIVERSITY OF STELLENBOSCH**



DECEMBER 2002

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VERKLARING

Ek, die ondergetekende, verklaar hiermee dat die werk in hierdie proefskrif vervat my eie oorspronklike werk is en dat dit nog nie vantevore in die geheel of gedeeltelik by enige universiteit ter verkryging van 'n graad voorgelê is nie.

Charles Antonie Keyter

DATUM

SUMMARY

A major factor affecting higher education world wide and in particular in Namibia is a trend towards massification. Within Namibia this trend is due to an increase in population, an increased demand for skilled human resources and an increase in political power of the formerly disadvantaged communities. This resulted in a rising demand that the government of Namibia provide access to higher education for increasing numbers of young people. The Polytechnic of Namibia (PoN) has therefore opted for distance education as a means of providing flexible and cost-effective education to the people of Namibia.

The term "distance education" is currently accepted internationally to describe a whole range of educational activities in which teaching and learning take place without the students and the educators being together for all, or even most of the time. This is made possible by the use of communication media in the form of print, broadcasts, audio and video recordings, telephones or computers and often a combination of several of these, usually in conjunction with occasional face-to-face contact between students and educators or between fellow students. These common characteristics are the result of the convergence of various traditions and a variety of political, economic, social, educational and technological developments in different countries at different times.

Managing distance education is a complex undertaking. In addition, educators have so far only had limited experience of managing distance education, because it has such a short history. This situation is further complicated by the fact that such diverse media are used, each with its own peculiar characteristics and that the scale of operation is often larger than in conventional education institutions. For the purpose of this dissertation distance education institutions were divided into four types, namely, dedicated distance education institutions, departments of existing conventional education institutions, consortia and hybrids. Furthermore, the internal organisation and management issues related

to the management and administration of distance education were explored and certain criteria were identified to develop a normative model of distance education management for a mixed or dual mode institution like the PoN.

The current distance education management model at the PoN was evaluated in terms of the normative management model identified. An evaluation was undertaken to identify the shortcomings and to make certain recommendations to overcome these shortcomings. A new distance education management model was also proposed. The aim of this distance education management model is to ensure that a suitable division of labour is created to fulfill the required distance education activities, and to ensure that all distance education activities are properly co-ordinated within the PoN and that the Centre for Open and Lifelong Learning (COLL) which is responsible for the managing of all distance education activities at the PoN gets the support it needs to carry out its task.

The writer believes that distance education will increasingly be an essential factor in making education accessible at all levels, in all forms, to all people at every stage of their life. New technology is increasingly making this possible. Due to the fact that distance education will become of vital importance in the twenty first century, distance education practitioners and planners need to be more flexible and open-minded about distance education's appropriate role and usage.

OPSOMMING

'n Belangrike faktor wat hoër onderwys dwarsoor die wêreld en veral in Namibië beïnvloed, is 'n neiging tot massifikasie. Binne Namibië kan hierdie neiging toegeskryf word aan 'n toename in bevolking, in die vraag na opgeleide menslike hulpbronne en in politieke mag by die voormalige agtergeblewe gemeenskappe. Dit het uitgeloop op groter eise dat die regering van Namibië toegang tot hoër onderwys moet verskaf vir 'n groeiende getal jongmense. Die PoN het dus besluit op afstandsonderrig as 'n manier om buigbare en koste-effektiewe onderrig aan die mense van Namibië te voorsien.

Die term "afstandsonderrig" word tans internasionaal aanvaar as die beskrywing van 'n hele reeks onderwysaktiwiteite waartydens onderrig en leer plaasvind sonder dat die studente en die opvoeders voortdurend of selfs vir die meeste van die tyd bymekaar is. Dit word moontlik gemaak deur die gebruik van kommunikasiemedia in die vorm van drukwerk, uitsendings, oudio- en beeldopnames, telefone of rekenaars, en dikwels 'n kombinasie van 'n aantal hiervan, gewoonlik gepaard met toevallige persoonlike kontak tussen studente en opvoeders of tussen mede-studente. Hierdie gemeenskaplike eienskappe is die resultaat van 'n sameloop van verskeie tradisies, asook 'n verskeidenheid van politieke, ekonomiese, sosiale, opvoedkundige en tegnologiese ontwikkelings in verskillende lande op verskillende tye.

Om afstandsonderrig te bestuur is 'n ingewikkelde onderneming. Hierbenewens het opvoedkundiges tot dusver slegs beperkte ondervinding opgedoen ten opsigte van die bestuur van afstandsonderrig, omdat dit so 'n kort geskiedenis het. Hierdie situasie word verder gekompliseer deur die feit dat 'n verskeidenheid van media gebruik word, elkeen met sy eiesoortige eienskappe, en dat die skaal waarop hierdie soort onderrig onderneem moet word dikwels groter is as in konvensionele opvoedingsinrigtings. Vir die doel van hierdie proefskrif is afstandsonderriginrigtings in vier tipes verdeel, naamlik,

afstandsonderwysinrigtings wat geen ander doel het nie, departemente in bestaande konvensionele opvoedkundige inrigtings, konsortia en 'n samestelling van twee of meer van hierdie drie. Hierbenewens is die interne organisasie en bestuursvraagstukke verwant aan die bestuur en administrasie van afstandsonderrig ondersoek en sekere kriteria is geïdentifiseer om 'n normatiewe model van afstandsonderrigbestuur te ontwikkel vir 'n gemengde of dubbelgang-inrigting soos die PoN.

Die afstandsonderrig-bestuursmodel wat tans aan die PoN gebruik word, is geëvalueer ten opsigte van die normatiewe bestuursmodel wat geïdentifiseer is. 'n Evaluasie is gedoen om die tekortkominge te identifiseer en om sekere aanbevelings te doen om hierdie tekortkominge aan te spreek. 'n Nuwe afstandsonderrig-bestuursmodel word ook voorgestel. Die doel van hierdie afstandsonderrig-bestuursmodel is om te verseker dat 'n geskikte arbeidsverdeling geskep word sodat die nodige afstandsonderrig aktiwiteite doeltreffend binne die PoN gekoördineer word, en dat die Sentrum vir Ope- en Lewenslange Leer, wat verantwoordelik is vir die bestuur van alle afstandsonderrig aktiwiteite aan die PoN die nodige steun kry om sy taak uit te voer.

Die skrywer glo dat afstandsonderrig toenemend noodsaaklik sal wees om onderwys toeganklik te maak op alle vlakke, in alle vorme, aan alle mense in elke stadium van hulle lewens. Nuwe tegnologie maak dit toenemend moontlik. Aangesien afstandsonderrig 'n noodsaaklike rolspeler sal word in die een en twintigste eeu, sal die beoefenaars en beplanners hiervan toenemend buigbaar en oop van gemoed moet wees ten opsigte van afstandsonderrig se toepaslike rol en toepassing in die samelewing.

DANKBETUIGINGS

By die voltooiing van hierdie proefskrif wil ek graag die volgende persone bedank vir hulle bydraes:

- My **HEMELSE VADER** vir die gawes van gesondheid en vermoëns om hierdie taak aan te pak en deur te voer.
- My studieleier en promotor, **PROFFESOR ERWIN SCHWELLA**, vir sy inspirerende leiding en volgehoue ondersteuning.
- My vrou, **CHARLOTTE**, dankie vir jou aanmoediging, geduld en veral jou hulp met die tegniese versorging en voltooiing van die proefskrif.
- My kinders, **GERRIT en WILLENE**, dankie vir julle aanmoediging en ondersteuning.
- My **OUERS**, vir hulle inspirasie en steun.
- Die **POLYTECHNIC OF NAMIBIA** wat aan my studieverlof en geldelike ondersteuning gegee het om die studie te voltooi.

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ACRONYMS

AVU	Audio visual
AVU	African Virtual University
BBS	Bulletin board system
BETD	Basic Education Teachers Diploma
CAL	Computer-assisted learning
CD	Compact disk
CD-ROM	Compact disk read only memory
CES	Centre for External Studies
CDT	Course development team
COL	Commonwealth of Learning
COLL	Centre for Open and Lifelong Learning
COST	College for Out of School Training
COLISA	Confederation of Open Learning Institutions in South Africa
CSB	Computer Support Bureau
CTL	Centre for Teaching and Learning
DCE	Department of Continuing Education
DDE	Department of Distance Education
DDT	Department of Distance Teaching
DEASA	Distance Education Association of Southern Africa
DEC	Distance Education Centre

DIT	Distance information technology staff
DTP	Desktop publishing
E-mail	Electronic mail
HOD's	Heads of department
HRC	Human Resources Code
HRD	Human resources development project
ICT	Information and communications technology
IDF	Institute for Development and Fundraising
IEC	International Extension College
IGCSE	International General Certificate for Secondary Education
MBECYS	Ministry of Basic Education, Culture, Youth and Sport
MHEVTST	Ministry of Higher Education, Vocational Training, Science and Technology
NAMCOL	Namibian College of Open Learning
NBC	Namibian Broadcasting Corporation
ND	National Diploma
NEC	National Extension College
NEU	National Extension Unit
NIED	National Institute for Educational Development
NOLNeT	Namibian Open Learning Network
NPC	National Planning Commission
PoN	Polytechnic of Namibia

PENNARAMA	Pennsylvania State University Learning Network
QAC	Quality Assurance Committee
RASSO	Regional Administrative and Student Support Officer
ROC	Regional Outreach Centre
SADC	Southern Africa Development Community
SC	Standing committee
SWAPO	South West Africa Peoples Organisation
TSA	Technikon Southern Africa
UNAM	University of Namibia
UNISA	University of South Africa
USA	United States of America
UKOU	United Kingdom Open University

CHAPTER 1

INTRODUCTION AND ORIENTATION

1.1. INTRODUCTION

Namibia, formerly called South West Africa, was officially colonised by Germany in 1884. Like Germany's other colonies at the close of World War I, it became a League of Nations mandate whose administration was assigned to an allied power, in this case, Great Britain. Britain in turn delegated Namibia's administration to South Africa. South Africa administered the country until independence on 21 March 1990.

When Namibia became independent the main task of the Namibian government was to address the multifaceted and complex tasks of national reconstruction and development. The success of these undertakings by the government of Namibia depends heavily on its education system. Education is therefore a central priority of the Namibian government (National Planning Commission (NPC), 1998, p. ix).

At independence, Namibia inherited an education system that was characterised by gross inequalities in the allocation of resources to schools for different ethnic groups. However, the country's unique geographical circumstances, namely a surface area of 823 000 square kilometers, with a population of 1,65 million unevenly distributed over vast distances have posed additional barriers to overcoming this legacy of unequal access. Furthermore, the country cannot afford to release large numbers of its professional, managerial, and para-

professional staff for extended periods of in-service full-time training or upgrading (Ministry of Higher Education, Vocational Training, Science and Technology (MHEVTST), 1998, p. 68). Such a strategy for redressing inherited inequities would prove too costly and too disruptive to daily activities. This chapter addresses the following issues related to the dissertation, namely:

- background to the study;
- purpose of the study;
- problem definition and study objectives;
- research methodology used; and
- the contents and structure of the dissertation.

1.2. BACKGROUND TO THE STUDY

Numerous studies undertaken within Namibia and government documents published since independence, 11 years ago, have highlighted the shortage of educated, skilled and experienced human resources in the Namibian labour market. According to official statistics, Namibia's population is dominated by young people, with over 42 percent below the age of 15 years (NPC, 1994, p. 271). In recognition of the central role of education and training in the process of national development, the Namibian government has allocated some 25 percent of the 1999 annual budget expenditure to the MHEVTST, and the Ministry of Basic Education, Culture, Youth and Sport (MBECYS) (Ministry of Finance, Annual Budget, 1999, p. 49).

Even before Namibia gained its independence, it was recognised that distance education had the potential to address Namibia's educational and training needs in a cost-effective manner. The experience of other countries has shown that courses of comparable or higher quality can be provided through distance

education. Furthermore, distance education has the flexibility to accommodate the varying levels of enrolments and the capacity to reach out to all corners of the country. Given the financial realities that constrain the development and maintenance of traditional education institutions, the only real prospects of significantly increased participation in senior secondary and tertiary education lies in the development of distance education programmes. According to the White Paper on Higher Education:

“...distance education can in the very near future offer the majority of Namibian adults the most economic, effective, and available opportunities to seek tertiary level qualifications. Limited financial resources, family and professional responsibilities, and geography make other alternatives unaffordable or inaccessible” (MHEVTST, 1998, p. 68).

Distance education can also play a very important role in the provision of opportunities for lifelong learning, which is central to the country's social and economic development (MBECYS, 1993, p. 11 - 15). Since independence in 1990, the educational system in Namibia has been transformed at all levels. At secondary level, reforms have led to a balanced curriculum and dramatic increases in the number of students. However, according to the National Human Resource Plan over a quarter of a million secondary school leavers will be unable to find employment between 2000 and the year 2020 (NPC, 1995, p. 1). Furthermore, the tertiary education sector in Namibia has been characterised as follows:

“Generally supply driven rather than need driven or demand driven, other programmes in our higher education institutions also seem out of touch with current realities. There is, therefore, an urgent need to synchronise tertiary

education programmes with the rest of the education system and with the development needs of the country" (MHEVTST, 1998, p. 5).

Over the last decade, participation in distance education programmes has expanded dramatically. In 1998, over half (52 percent) of all Namibians studying at tertiary level were enrolled for distance education programmes with institutions in Namibia and South Africa. In addition, 47 percent of candidates who entered for the two sessions of the International General Certificate for Secondary Education (IGCSE), (Grade 12) examination in 1999 had prepared through distance education courses (Du Vivier, 2000, p. 1). Although distance education is currently seen as the "inferior" part of the formal education system, it is likely to play an ever-increasing role in the development of Namibia's human resources.

In the public sector in Namibia, there are four institutions involved in offering distance education programmes, namely:

- the Namibian College of Open Learning (NAMCOL);
- the University of Namibia, (UNAM);
- the PoN; and
- the National Institute for Educational Development (NIED).

Since all of these institutions are dependent upon government subsidies, the development of distance education programmes is hampered by funding constraints in the current financial climate. However, during 1999 and 2000 the four publicly-funded institutions involved in distance education worked together with the MHEVTST and the MBECYS to coordinate their activities. These efforts resulted in the establishment of a National Trust, to be known as the Namibian Open Learning Network (NOLNeT) in June 2001.

1.3 PURPOSE OF THE STUDY

Contact tuition and distance education were until recently contrasting modes of education. Hardly ever did the two modes of education meet. Distance education was also considered inferior to face-to-face learning. Currently one of the most significant developments in distance education is the emergence of dual mode institutions of higher education. These are traditionally contact universities, technikons/polytechnics and colleges that have introduced distance education programmes. The growth in this mode of education lies partly in the large numbers of students reached by these programmes, students who might not otherwise receive the benefits of higher education.

The involvement of institutions of higher education in distance education can be attributed to the following factors:

1.3 1. A changing student population

There is clear evidence that the future population of students will be dramatically different from past and present students. These students will have different needs and expectations. Students will become older, more involved in part-time rather than full-time instruction, less able to study in the residential mode and more selective in exercising their educational options than in the past. The growing body of students will be concerned with lifelong opportunities, specific programmes geared to the needs of business and industry and the advancement of international perspectives in education that address the needs of a global market and interdependent world order. The greatest adjustment that will be made will be in the context of learning and the delivery of education to students. This will demand a completely new sense of higher education, especially

institutions of higher education, and their role in society (Pennsylvania State University, 1992, p. 14 - 16).

1.3 2. The increasing role of technology

Technology is driving a series of profound, global changes. In just a few years, computers and associated information technologies have dramatically expanded the options for providing access to information and tools for its manipulation. Information technologies are a major aspect of educational and economic development. Societies that are not computer literate will stand little chance of competing in the twenty-first century. Communication networks have made the world much smaller and promise to create a true “global village” with a vast common market that exists outside increasingly ineffective barriers like national boundaries and political influence. The world is being transformed into a multi-media environment and this transformation must be taken into account when we look at education for the future. Technology will demand a shift in our culture from “terminal” to “lifelong” learning as a norm, and a reorganisation of our thinking, culture and social institutions. Institutions of higher education will not be immune to these changes. Technology-based learning has to become part of higher education’s strategies for the future. The use of technology can increase educational effectiveness. Societies retaining outmoded approaches could be consigned to a permanent education underclass (Pennsylvania State University, 1992, p. 16 - 17).

1.3 3. A changing economic picture

Although there is an increasing demand for education, there is at the same time a decline in resources for higher education. The decline of public support, the limitations of increased revenues from tuition and the potential for raising funds in

a weak economic environment are national phenomena that affect all institutions of higher education. Higher education is caught between two conflicting forces, namely increased demands for services and diminished resources to meet those demands. There is a need for higher education to develop a new paradigm to address its growing financial problems. Higher education institutions need to establish new partnerships with the government and the private sector. Higher education institutions need to become more business-like in their activities. Higher education must reconstruct and reconstitute itself as a financially stronger and more self-reliant institution if it is to maintain its position in society. Distance education is an important means to increase the quality of education and research, utilise resources more efficiently, increase the effectiveness of scholarship and learning, and expand the ability to provide service (Pennsylvania State University, 1992, p. 17 - 20).

These three factors necessitate the need for the implementation of distance education as a tool for change in higher education. Distance education can be used to address the needs of the future student population in Namibia. Institutional changes need to be implemented in institutions of higher education to address this need. Institutional and managerial changes need to be implemented, especially within the PoN. In this regard a distinctive managerial model of distance education needs to be established at the PoN. This model must ensure that the identity and uniqueness of distance education stay intact.

1.4 PROBLEM DEFINITION AND STUDY OBJECTIVES

The first tertiary institution for higher education in Namibia was established in 1980, namely the Academy for Tertiary Education. The Academy at that stage consisted of three components, namely a university, technikon and college for out of school training (COST). The Academy started by offering mostly University

of South Africa (UNISA) programmes. From a very early stage in its existence the Academy also had a distance teaching department. Initially the courses offered were either UNISA programmes or programmes very closely modeled on UNISA's correspondence programmes.

The Department of Distance Teaching (DDT) at the Academy for Tertiary Education was a purely administrative unit in the office of the registrar. This department managed the writing, printing and distribution of the programmes, commissioned, without guidance, from academic staff members. It also exercised no academic or pedagogic control, or even influence, over any of these activities. The programmes offered were owned by the university, technikon, and COST (Academy, 1990, p. 15).

As the birth of the new, post-independence UNAM approached a plan was developed for a Centre for Adult and Continuing Education and Distance Teaching. At about the same time the DDT became the Centre for External Studies (CES), a move that marked, at least in theory, the birth of academic and pedagogic responsibility. In practice it has largely continued to offer the old-style programmes. The academic responsibilities regarding programmes were in the hands of the faculties at the university component, and the curriculum groups at the technikon component. At that stage all programmes were managed and administered by UNAM. The distance education population at that stage was 2000 students. Of these 2000 students, half were enrolled for the two technikon study courses, namely the Diploma in Public Administration and the Diploma in Police Science, at a distance.

During 1995 a Presidential Commission of Higher Education proposed the delinkage of the technikon component from UNAM. This resulted in the establishment of the PoN in 1995. According to the Commission the PoN would

occupy a position alongside the UNAM at the head of the national education system. The scope and mode of operation of these two institutions run parallel to one another, but also interlock and overlap. The aim of the PoN is to produce competent middle-level human resources for the country's economy. As the economy requires more advanced technical skills, the PoN will eventually award higher qualifications. This has been underlined by the mission statement of the PoN, namely:

“The Polytechnic of Namibia will contribute to the development of the economic and social systems of Namibia through the provision of higher education for the occupational and para-professional manpower needs of the country and its wider environment within the guidelines of the Namibian Constitution” (PoN Prospectus, 2001, p. xx).

At the time of delinkage the majority of distance education students were PoN students, because UNAM had started phasing out all old courses. This move had a serious effect on the PoN students who had enrolled for distance education courses. UNAM took responsibility for the administration of these programmes in the distance education mode, while the newly established PoN was supposed to undertake the academic responsibility and the certification of courses without any incentive from the government of Namibia. In terms of the higher education subsidy formula, institutions of higher education receive money from the Namibian government based on the number of students enrolled at the institution. In this regard the money allocated to UNAM included the money earmarked for the PoN students. This created a number of problems between the two institutions. The Council of the PoN therefore took a decision in 1996, to delink all distance education activities from UNAM and set up its own Distance Education Centre (DEC). It is in this historic context that this dissertation is undertaken and that the problem of this dissertation is stated:

"Is the current managerial model used for distance education at the PoN the best practice to address the needs of the PoN as well as the needs of the PoN distance education students in Namibia?"

The objectives of this dissertation are to:

- analyse and define the concept "distance education" within the Namibian context;
- study local, regional and international literature on the different management models of distance education;
- identify a normative model of distance education management;
- evaluate the current distance education management model at the PoN; and
- develop a management model for implementation at the PoN.

1.5 RESEARCH METHODOLOGY

A practical and problem-solving approach will form the bases of this dissertation. In this regard a combination of research methodologies will be used to understand the practice of distance education within the Namibian context and especially within the PoN.

A qualitative data collection approach will be used because it is a source of well-grounded, rich descriptions and explanations of processes in identifiable local contents (Miles & Huberman, 1994, p. 10). According to Leedy (1993, p. 140) the

"qualitative research process is both creative and scholarly. It is a creative, scientific process that necessitates a great deal of time and critical thinking, as well as emotional and intellectual energy. One must have a true desire to

discover meaning, develop understanding and explain phenomena in the most thorough way possible. Qualitative research is not slovenly, undisciplined, "soft" research but creative scholarship at its best."

As a qualitative researcher the writer considers his task to be one of analysis and synthesis. In order to complete this task the PoN is demarcated as a case study to determine the relevance and applicability of its distance education management model.

The research methodology used in this dissertation is a combination of the following:

- historical method;
- a descriptive study method;
- normative constructive method; and
- an evaluation method.

A historical method has been used by the writer because if the origin of the present is known, then it is possible to understand the problems and conventions of the present. Historical data are almost completely qualitative in nature. History arrives localised, in bits and pieces - isolated events, dates, individuals (Leedy, 1993, p. 141). A synthesis is therefore indispensable to research history, because the writer must fit the pieces together to form a meaningful matrix. In this regard the current situation at the PoN must be directly observed and evaluated.

In order to achieve this goal the writer has located existing resources which include official documents and statistics, laws, policies, annual reports and relics in which information from the past and present has been preserved. The writer will in no way interfere or intervene with the events and does not observe them

directly, but describes, analyses, and interprets those that have already taken place and been documented. The writer will at all times give preference to primary rather than secondary information sources. Primary resources can be defined as:

"...the written or oral account of a direct witness of, or a participant in, an event, or an audiotape, videotape or photographic recording of it" (Wellman & Kruger, 1999, p. 36).

The reason for this preference is that with each transfer of information from one source to another, the information may be inadvertently or deliberately distorted (Wellman & Kruger, 1999, p. 186).

The descriptive study deals with a situation that demands the technique of observation as the principal means of collecting the data. Due to the fact that the descriptive survey method relies upon observation for the acquisition of data, the data will be organised and presented systematically so that valid and accurate conclusions may be drawn from them. The current PoN distance education model and other models of distance education will be described and clearly defined for this dissertation.

As far as the descriptive research procedure itself is concerned, observation is used by the writer to study the chosen case study, while descriptive statistics used in annual reports are used to verify certain assumptions made. The writer not only observed, but also searched, in an inductive fashion, for recurring patterns and consistent regularities. The content analysis was made by means of analysing, reviewing and evaluating relevant books, journals, and reports in distance education management. An assesment and review of all relevant Namibian legislation and policy documents, UNAM and PoN policy documents

were made. Searching the Internet and online journals and documents is part of the field of this dissertation.

Due to the fact that the descriptive survey method relies upon observation for the acquisition of data, the data will be organised and presented systematically so that valid and accurate conclusions may be drawn from them. By using the qualitative data collection approach it is possible for the writer to preserve a chronological flow of activities and observe which events led to which consequences. In this way the writer can derive fruitful explanations and conclusions.

The information obtained by the above-mentioned means will be used to develop a normative model for distance education management. The normative model research method is used to ".....construct a model for purposes of optimising the attainment of some utility" (Fox & Meyer, 1996, p. 86). The normative model will be a conceptual representation of a set of fixed or variable components in an ideal distance education system. This model will then be used as an evaluation instrument to identify the shortcomings within the current model used at the PoN.

An evaluative research method will be used to measure the performance and impact of the current distance education model at the PoN on the operations of the programmes so as to improve its effectiveness at achieving its objectives. The evaluative method will allow the writer to identify the strengths and weaknesses of the current distance education model used at the PoN. After evaluating the current management model the writer will be in a position to develop a new and ideal model for the management of distance education at the PoN.

1.6 CONTENT AND STRUCTURE OF THE DISSERTATION

The following is a brief description of the content and structure of the dissertation.

Chapter one gives a general background and purpose of the dissertation. The chapter further states the problem, study objectives, and the research methodology used in the dissertation.

Chapter two gives a brief overview of the historical background to distance education and identifies the different mediums of communication in distance education. The advantages and disadvantages of each medium will be briefly explained in order to make a sound judgment about the medium proposed for use in distance education. This chapter is not an attempt to explain the philosophy of distance education but rather to explain the term "distance education" within the Namibian context. The writer also defines a working definition of the term "distance education".

In chapter three the different models of distance education is described. Before the different distance education models is described a classification is made according to which organisations can be structured. In this regard a distinction is made between macro and micro organisations. The purpose of this description is to determine the context in which the different distance education models operate. The characteristics, advantages and disadvantages of each model used are explained, in order to compare between the different models. The factors, which influence the selection of a model, are briefly identified and explained.

Chapter four focuses on the development of a normative model of distance education. Two management frameworks are analysed to conceptualise the nature of distance education institutions. The key management issues related to

the management of distance education institutions are identified and explained. The writer proposes a normative distance education management model that will be compared with the current distance education management model at the PoN.

Chapter five deals with the current situation regarding distance education in Namibia. This chapter describes what happened in Namibia before and after independence in 1990 regarding distance education. A detailed description will also be given of the current distance education model used at the PoN.

Chapter six is evaluative in nature. In this chapter a comparison is made between the practical application of distance education at the PoN and the theoretical guidelines for developing and establishing a normative distance education management model which will serve as a guide in evaluating the current situation at the PoN.

Chapter seven consists of the conclusions reached as well as the recommendations made to address the problem statement identified in chapter one. The writer proposes a management model for distance education at the PoN.

1.7 CONCLUSION

Distance education is expanding in importance annually. The provision of education and specifically higher education is enriched by having conventional, distance and virtual systems complementing each other and expanding access for citizens of any given country. This dissertation recognises the important role distance education can play in the improvement and upliftment of educational opportunities for the people of Namibia. The future of higher education will be

influenced by the factors identified. Recognition of and addressing these factors will determine the success of distance education programmes offered.

This dissertation calls for the adoption of a new paradigm and management model that places distance education within the core of the PoN's strategic priorities and the development and utilisation of distance education as a key component in all future planning. The focus of this dissertation is to serve as a starting point from which redirection of the approach to higher education can take shape within the PoN.

At the beginning of the new millenium crucial decisions face the PoN regarding the provision of distance education programmes to prospective students. The establishment of a cost-effective and efficient managerial model for distance education can improve activities currently undertaken.

CHAPTER 2

DISTANCE EDUCATION: AN OVERVIEW.

2.1. INTRODUCTION

The rationale for distance education was described in Chapter one as a method to respond to growing educational needs that are not easily met or which are impossible to meet in traditional forms of education. Furthermore, educators have seen distance education as one of the more innovative approaches to teaching the twenty-first century student. In this regard, there has been a great upsurge in distance education all over the world. Government departments and private organisations have established distance education systems to deal with increasing educational needs that are unable to be met by the traditional educational systems. These educational needs can be identified as follows:

- to have programmes for students to learn in scattered communities covering sparsely populated, large geographical areas such as found in Australia, Canada, North America, South Africa and Namibia;
- the training of educators who are already working and cannot be taken away for more than a few weeks;
- the provision of educational opportunities for adults who have been deprived of education;
- the acceleration of manpower development;
- increasing the output of educational systems;
- to bring into the classroom expert knowledge, rare experiences, and stimulating personalities;
- to update knowledge and skills;

- to initiate national campaigns which deal with health, political issues; and
- to have a cost-effective programme for large numbers of students (Gachuhi & Matiru, 1989, p. 12).

Distance education's greatest asset is not only in meeting these needs but also in accommodating almost limitless numbers of students.

The aims of this chapter are to:

- describe the historical background to distance education;
- describe and define the term "distance education";
- identify the different media of communication in distance education; and
- consider the advantages and disadvantages of the different communication media.

For the purpose of this dissertation the writer will also give a working definition of distance education.

2.2. HISTORICAL BACKGROUND TO DISTANCE EDUCATION

Part-time studies in the early years were career-oriented and correspondence-based. One of the best known examples is the well-known advertisement in the *Boston Gazette*, 20 March 1728. The advertisement was aimed at those:

“desirous to learn the art of the New Method of Short Hand, by means of several lessons sent weekly to them” (Battenberg (1971) in Buro vir Universiteitsonderrig, 1996, p. 17).

This was an offer to students who wanted to study shorthand through correspondence. It is rightly claimed that this must be the first recorded offer of a correspondence course. A Swedish advertisement of 1833 also refers to education via the post (Baath (1980) in Buro vir Universiteitsonderrig, 1996, p. 18).

In England, in the 1840s, a more famous name in shorthand, Mr Isaac Pitman, started offering programmes by correspondence. Isaac Pitman used postcards to teach shorthand to faraway students. He is generally credited with being the first to start regular programmes by correspondence including a two-way communication element (Gachuhi & Matiru, 1989, p. 12). In 1843 the Phonographic Correspondence Society was established to coordinate all study aspects regarding the shorthand courses by correspondence. This spearheaded a number of correspondence courses in the United States of America (USA) and Europe, for example:

- in Europe, Charles Toussaint and Gustav Langenscheidt started the first organised instruction in 1856 (Moore, 1991, p. 290). The well-known language courses of Toussaint-Langenscheidt were offered via the distance mode in 1856;
- during 1874 the Illinois Wesleyan University in the USA started offering programmes in absentia;
- in 1894 the Rustinsches Fernlehrinstitut in Berlin started offering programmes via the distance education mode to students who were enrolled for the Abitur (university admittance examination); and
- the well-known Swedish correspondence school Hermods, started operating in 1898 (UNISA, 1996, p. 17 - 18).

When the idea of a conventional university was accepted in England in the 1880s, Richard Moulton, one of the strongest advocates of the correspondence education concept, emigrated to the USA to help build

William Harper's new correspondence university in Chicago, namely the University of Chicago. The university started correspondence education by setting up its own correspondence course division in 1891 (Rumble, 1989, p. 83).

By the end of the nineteenth century, private correspondence colleges had been established in many countries and were meeting the needs of individual students in various programmes, for example:

- Skerry's College in Edinburgh;
- Hermods School in Sweden, now Hermods – NKI Skolen; and
- The International Correspondence School in the United States of America (Rumble, 1989, p. 83).

The University of Queensland in Australia began with correspondence teaching in 1911. In 1919 the College of Estate Management was established in London. The purpose of the College was to train students in estate management via the distance education mode.

In 1920 the Soviet Union introduced far-reaching innovations in distance education. Due to a great shortage of educated manpower, it developed a structure of distance education where correspondence courses were integrated with regular university programmes including technical programmes. This was the beginning of a multi-media approach to distance education and a breakthrough in teaching technical subjects to students at a distance. Occasional classroom attendance was mandatory. It was also possible for students to be given credit for the part-time correspondence studies they had done and to switch to full-time studies at the university (Gachuhi & Matiru, 1989, p. 13). The Soviet Union evolved the most innovative and sophisticated distance education model, which was the forerunner of the United Kingdom Open University (UKOU).

The late 1960s and early 1970s brought critical change in correspondence study. It was a time of conceptualizing and experimenting with new media. The experiments included, in Peters's words, projects of the University of Nottingham and the National Extension College (NEC) in co-operation with the Television Broadcasting Corporation in England, that led to an idea for a new and conventional academic institution called the UKOU (Peters, 1976, p. 101).

The systematic use of two-way communication by post for educational purposes over a wide range of programmes also became popular in the USA, Canada, Australia and Europe during that time. As a result educational planners began to be more critical in the presentation of instructional materials and delivery systems. Numerous distance education institutions were established during this time, for example:

- in 1949 an Independent Department of External Studies was created at the University of Queensland in Australia, to deal with distance education;
- the University of New-South Wales, Australia, started operating as a distance education university in 1954;
- the first autonomous distance education university established in Australia, was Deakin University;
- the Darling Downs Institute of Advanced Education in Queensland, Australia, established decentralised centres in 1978 to deal with distance education. Each of the centres consisted of a reference library, courseware and audio cassettes to assist students studying through the distance education mode. The centres were also used as so-called "tele-tutorials", where students received support as well as computerised training; and
- the Massey University in New Zealand started operating a distance education unit at tertiary level.

An outstanding pioneer, that heralds the influence of public distance teaching organisations was UNISA which emerged as a development of the University of the Cape of Good Hope, established in 1916 as an examining body based on the model of the University of London. It started distance teaching in 1946. According to a former member of the South African parliament, this was the beginning of a "people's university" in South Africa and was therefore established as a distance teaching university through a governmental decree of 1962 (Boucher (1973) in Buro vir Universiteitsonderrig, 1996, p. 16).

The founding of the UKOU in 1970 marked the beginning of a new era in distance education. It created general public recognition of distance education. With a few exceptions, educational authorities had, until then, been sceptical in their appraisal of this kind of education. The image of distance education had changed from one of the little respected endeavors to one of a publicly acknowledged type of education.

The twentieth century has been distinguished from the nineteenth century by the growth of interest in distance education on the part of national authorities. This is evident through:

- the encouragement given to individual institutions to provide programmes at a distance;
- the establishment of publicly-funded institutions to teach at a distance, in response to identified national needs;
- legislation favourable to distance education; and
- recognition of distance education as a specific means of provision within national educational policies (Rumble, 1989, p. 84).

The twentieth century has seen a worldwide expansion of distance education institutions. In this regard a number of distance education institutions

worldwide can be identified. However, for the purpose of this dissertation a few of these institutions can be identified, namely:

- the Sukhothai Thammathirat Open University in Thailand has some 200,000 students with a target of admitting around 500,000 students in the future;
- Germany's Fern Universität has a student population of 30,000 students;
- there are 83,000 students in Portugal's Universidade Aberta;
- Canada's Athabasca University is one of the smallest autonomous institutions with just 16,000 students;
- the UKOU has an enrolment of about 130,000 students; and
- UNISA has an enrolment of 150,000 students worldwide.

Like the UKOU, foreign distance education institutions are autonomous, and have a national mandate. They receive their money from central governments and are required to provide distance education throughout the country. The USA is one of a dwindling group of countries that has no national, autonomous distance education university. In the USA there is a large number of institutions that design and deliver distance education to a student market that is extremely geographically fragmented.

2.3. THE TERM “DISTANCE EDUCATION”

The term distance education is used to cover various forms of study at all levels where students are not in direct physical contact with their educators. Distance education, like any formal method of education, is a means by which someone who desires to learn engages in some form of communication with someone who can educate. In distance education, as in traditional education programmes, the student must:

- acquire knowledge;
- develop skills in using that knowledge; and
- gain an understanding of the value and application of that knowledge.

For the larger part of its history, distance education lacked a widely accepted definition and theory. The term has been widely used since the beginning of the 1970s and has achieved general acceptance, although there seem to be different meanings to the concept distance education. The term "distance education" acquired its universal acceptance in 1982 when the International Council for Correspondence Education changed its name to the International Council for Distance Education (Gachuihi & Matiru, 1989, p. 11). Prior to this universal acceptance, a number of terms were used to describe this mode of education. The language and terms used in the distance education literature can be confusing. Among the more commonly used definitions to define the term distance education are the following:

- correspondence study;
- home study;
- independent study;
- external studies;
- continuing education;
- distance teaching;
- distance learning;
- self-instruction;
- adult education;
- technology–based or mediated education;
- student–centered learning;
- open learning;
- open access;
- flexible learning; and
- distributed learning.

The term "distance education" subsumes a number of existing terms but not all are synonymous. For the purpose of this dissertation the following commonly used terms have been identified in the literature:

- correspondence study;
- independent study;
- distance teaching;
- distance learning;
- distance education. and
- open learning.

Each one of the commonly used terms related to distance education will be analysed next in terms of earlier and most recent literature. The first term to be analysed is correspondence study.

2.3 1. The term "correspondence study"

The most commonly used term, which has existed for about a hundred years, is correspondence study. The term "correspondence study" has been defined by a number of authors as reflected in the following definitions.

Peters (1976, p. 12) describes correspondence study as an industrialised form of teaching. He identifies a number of traits which correspondence study shares with other forms of industrialised processes. Among these are:

- rationalisation;
- mechanisation or automation;
- mass production; and
- division of labour.

He, furthermore, explains that:

"correspondence study is a method of imparting knowledge and skills which are rationalised by the application of division of labor and organisational principles as well as by the increased use of technical media, especially for the purpose of reproducing objective teaching behaviour which makes it possible to instruct great numbers of students at the same time wherever they are" (Peters, 1976, p. 12).

Correspondence study has also been characterised by Graff (1986, p. 39) as:

- self directing;
- self-teaching; and
- autonomous learning.

Graff's definition is, inclusive of the term "distance education", with the correspondence aspect as an important part, especially where the educator's effort converges with that of the student.

According to Holmberg (1986, p. 1) distance education has its roots in correspondence education. Correspondence study has gradually developed into a way to include a number of media apart from printed texts and interaction in writing, for instance, recordings of the spoken word, radio, and television, video recordings, telephone and computer communication.

Correspondence study reflects the origins of distance education as a product of the development of a cheap, reliable postal service, and the fact that the early means of communications was by letter (Rumble, 1989, p. 64 – 65). Correspondence study can therefore be regarded as a particular form of education based on written assignments and feedback letters. The most important association attached to this designation is the educator who

instructs by writing and the student who learns by reading. In this regard, it popularised a new teaching and learning behaviour amongst the student and educator.

According to Keegan (1996, p. 35) the main difficulty with the term correspondence study is:

"that it cannot encompass the didactic potential of this form of education in the 1990s and beyond: print-, audio-, video-, and computer-based technologies must be reflected by the terminology chosen".

From the above-mentioned definitions, the writer concludes that correspondence study is the traditional mode of distance education, and is characterized by an emphasis on teaching by the educators rather than on learning by students. The teaching flows mainly one way, from educator to student. This is a weakness that can be rectified by a shift in emphasis to the student. Correspondence study furthermore makes use of printed courseware, which can be authoritarian, pedantic, not student-centered, and does not reflect the use of technology in teaching distance students.

Due to the above-mentioned criticism the term "correspondence study" cannot be used as an overall generic term to describe this area of education. The term has therefore been replaced with independent study, the second most commonly used term to describe distance education.

2.3 2. The term "independent study"

The term "independent study" became very popular amongst countries worldwide. In Germany the term used was called "fernunterricht", in France it was called "tele-enseignement", and in Spain it was called "educacion a distance" (Moore, 1991, p. 288). The term "independent study" was first used

in the USA by Charles Wedemeyer to describe distance education at university level. He gives the following definition:

"Independent learning is that learning that changes behavior, that results from activities carried on by learners in space and time, learners whose environment is different from that of the school, learners who may be guided by teachers but who are not dependent upon them, learners who accept degrees of freedom and responsibility in initiating and carrying out the activities that lead to learning" (Wedemeyer (1973) in Keegan, 1996, p. 59).

Wedemeyer (1977) in Keegan (1996, p. 60) made a determined effort to establish the term "independent study" as the umbrella term for this field of education both in the USA and throughout the world:

"Independent study consists of various forms of teaching-learning arrangements in which teachers and learners carry out their essential tasks and responsibilities apart from one another, communicating in a variety of ways. Its purposes are to free on-campus or internal learners from inappropriate class placing or patterns, to provide off-campus or external learners with the opportunity to continue learning in their own environments, and developing in all learners the capacity to carry on self-directed learning, the ultimate required of the educated person".

Wedemeyer (1977) in Keegan (1996, p. 61 - 62) lists the main characteristics of independent study as follows:

- "instruction should be available at any place where there are students - or even only one student - whether or not there are teachers at the same place at the same time;
- instruction should place greater responsibility for learning on the student;

- the instructional plan or system should free faculty members from custodial duties so that more of the teachers' and students' time can be given to truly educational tasks;
- the instructional system should offer students wider choices (more opportunities) in subjects, formats and methodologies;
- the instructional system should use, where appropriate, all the teaching media and methods that have been proven to be effective;
- the instructional system should mix and combine media and methods so that each subject or unit within a subject is taught in the most effective way;
- the media and technology employed should be "articulated" in design and use; that is, the different media or technologies should reinforce each other and the structure of the subject matter and teaching plan;
- the instructional system should preserve and enhance opportunities for adaptation to differences among individual students as well as among teachers;
- the instructional system should evaluate student achievement not by raising barriers concerning the place where the student studies, the rate at which he/she studies, the method by which he/she studies, the sequence in which he/she studies, but instead by evaluating as directly as possible the achievement of learning goals; and
- the system should permit students to start, stop, and learn at their own pace, consistent with the learner's short-and long-range goals, situations, and characteristics".

From the above-mentioned definitions of Wedemeyer's concept of independent study, the writer concludes that the concept comprises two different forms of education, namely:

- independent study for the internal student; and
- independent study for the external student.

For the internal student, independent study makes freedom from class attendance possible, while for external students the allocation of series of readings and individual study programmes is possible. However, the linking of internal and external programmes in one definition tends to diffuse Wedemeyer's ideas on internal independent study (Keegan, 1996, p. 61).

Moore (1977, p. 11-12) defines independent study as:

"an educational system in which the student is autonomous and separated from his teacher by space and time, so that communication is by print, electronic, or other than non-human medium".

According to Moore's definition, independent study is a system consisting of three sub-systems, namely:

- student;
- educator; and
- method of communication.

A more recent definition of independent learning is given by Race (1998, p. 8) who defines the term as:

"This term is usually employed to emphasize the freedom of learners studying by open, distance or flexible learning processes, using either print-based or computer based learning resources, and supported by printed briefings or human tutors. Interpretations of independent learning include the use of learning contracts or negotiated learning agreements, with negotiated self-assessment of students' achievement of their agreed outcomes".

From the above-mentioned definitions of independent study, the writer concludes that:

- independent study emphasises the autonomy and active role of the student in distance education;
- the student is at a distance or “apart”; and
- he/she is independent from an educational institution.

The main weakness of independent study as a generic term is that it indicates independence from an educational institution, which is not the case in distance education. However, the term is still widely use for university-level distance education programmes in the USA (Keegan, 1996, p. 36).

The third commonly used term to describe distance education is distance teaching.

2.3 3. The term "distance teaching"

The term "distance teaching" has been used for many years as a characteristic of distance education. Moore (1977) in Keegan (1996, p. 41 - 42) has described distance teaching as:

“Distance teaching may be defined as the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviours, including those that in a contiguous situation would be performed in the learner's presence, so that communication between the teacher and the learner must be facilitated by print, electronic, mechanical or other devices”.

The term was widely used by the UKOU for its didactic strategies. Distance teaching places a lot of emphasis on the role of the institution and the role of

the educator. The student is not involved in this process, which makes it inadequate for the field of education the writer wants to define.

Due to the absence of the learning part in the term "distance teaching", a new school of thought has developed the term "distance learning". In this regard the fourth commonly used term to describe distance education is distance learning.

2.3 4. The term "distance learning"

In the 1990s the term "distance learning" grew in usage. The term was used to emphasise the student-centredness of the process. In the USA the term "distance learning" has come to be used as a global term for the use of electronic technologies in distance education. Portway and Lane (1994) in Keegan (1996, p. 37) use it to cover audio-conferencing, audiographics, teleconferencing, business television (one-way video teaching by satellite), video conferencing, two-way interactive video and also desktop video conferencing.

According to Race (1998, p. 7) distance learning is:

"the term usually applied to open learning which takes place at a distance from the provider of the learning materials. Examples include the Open University in the UK, and correspondence courses throughout the world".

Distance teaching and distance learning are only half the process the writer seeks to describe. A suitable term to bring together both the teaching and learning elements of this field of education is distance education, which will be described in the next section.

2.3 5. The term "distance education"

Distance education may be defined in a number of ways. The diversity of definitions is partly attributable to the variety of purposes distance education serves and the multiplicity of media used in distance education. The more widely accepted definitions of distance education are the following:

Holmberg (1977) in Keegan (1996, p. 42) defines distance education:

“as the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises but which, nevertheless, benefit from the planning, guidance, and tuition of a tutorial organization”.

Two factors emerge from this definition, namely:

- planning, guidance and tuition are a function of an organisation as compared to an educator; and
- there is no direct mention of the need for mediated communications.

Holmberg (1985, p. 1 - 3) established six categories of the concept of distance education as follows:

- "Pre-produced courses. This is normally the basis of distance study. It is usually in printed form but may also consist of presentations by other media such as television or radio programmes, experimental kits or audio or video tapes.
- Organised two-way communication, which takes place between the student and a teaching (supporting) institution and is in most cases based on students' assignments for submission. The written word or correspondence is the most common medium in two-way

communication, while the telephone is also becoming an increasingly important medium in distance education.

- Individual study. Distance education caters for individual study. This is what all education (including face-to-face classroom teaching) must do.
- Distance education can be used as a form of mass communication, because of the large number of students it can reach.
- Industrial type of teaching and learning. When preparing a mass communication programme, methods of industrial work are practicable.
- Mediated form of guided didactic conversation. Personal communication of a conversational character is the backbone of distance study regardless of the technological approaches implied or communication media utilised. Organised distance education is, therefore, regarded in this respect, as a mediated form of guided didactic conversation".

The Task Force on Distance Education at the Pennsylvania State University viewed distance education as a very specific term that applies only to situations involving geographical separation, an educator, a student or students, interactive communication, and the acquisition of knowledge, skills, and understanding. In this sense, distance education is not just teaching people who are at distance from the educator nor learning from someone who is not physically present. Although both distance teaching and distance learning do take place, there is also the demand that some form of interaction should exist between the educator and student. For this reason, educational tools like "programmed learning texts" and "teach yourself books" are excluded from this and most accepted definitions of distance education. Similarly, instructional television broadcasts, audio and video taped lessons, and computer learning programmes, on their own, would not be considered as a form of distance education. However, any or all of these may be part of a distance learning system if they are joined with some form of two-way communication that allows interaction between the student and the educator.

Two-way communication may be established using a wide variety of media including computer communications, telephone, and postal service. Emerging technologies like interactive multi-media and fiber-optic networks are already expanding the interactive capabilities of distance education and promise to yield even greater capacity in the future (Pennsylvania State University, 1992, p. 2).

Distance education is defined by Portway and Lane (1994, p. 195) as:

“The term distance education refers to teaching and learning situations in which the instructor and the learner or learners are geographically separated, and therefore, rely on electronic devices and print materials for instructional delivery. Distance education includes distance teaching – the instructor’s role in the process – and distance learning – the student’s role in the process”.

Keegan (1996, p. 50) has identified the following elements of distance education:

- "the quasi-permanent separation of teacher and learner throughout the length of the learning process (this distinguishes it from conventional face-to-face education);
- the influence of an educational organisation in the planning and preparation of learning materials and in the provision of student support services (this distinguishes it from private study and teach-yourself programs);
- the use of technical media - print, audio, video or computer - to unite teacher and learner and carry the content of the course;
- the provision of two-way communication so that the student may benefit from or even initiate dialogue (distinguishes it from other uses of technology in education); and

- the quasi-permanent absence of the learning group through-out the length of the learning process so that people are usually taught as individuals and not in groups, with the possibility of occasional meetings for both didactic and socialization purposes".

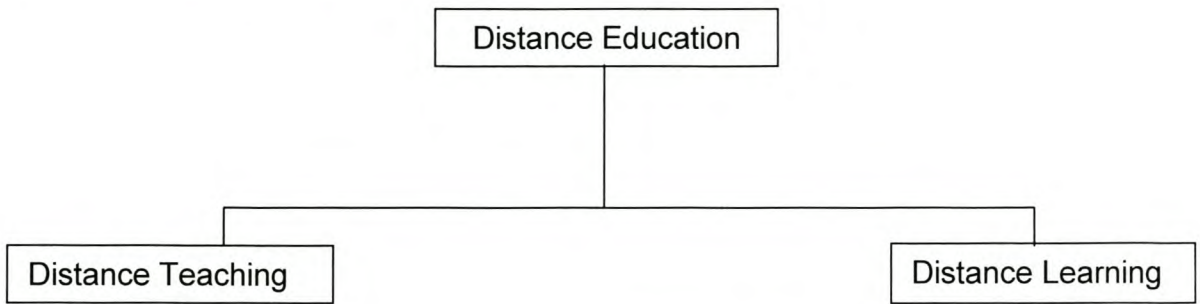
From the above definitions it is clear that there is not a single universally accepted definition of distance education. This is because there are many structurally different distance learning systems. Due to the above-mentioned it is therefore not possible to identify a universally valid definition for distance education. There are, however, basic elements of distance education, which are fundamentally implicit or explicit in all definitions. These basic elements of distance education are the following:

- "distance education implies a separation between the student and the educator throughout the teaching process;
- separation of the student from a learning group throughout the duration of the learning process;
- utilisation of mechanical or electronic means of communication to carry the content of the course; and
- provision of means for two-way communication so that the student can benefit from or initiate dialogue" (Keegan, 1996, p. 111).

Keegan's definition of distance education is one of the most comprehensive definitions. It accommodates the characteristics of distance education such as two-way communication and the importance of technical media, the inclusion of face-to-face instruction and the variety of methods that may be employed.

For the purpose of this dissertation distance education consists of both distance teaching and distance learning. The relationship of distance teaching and distance learning may therefore be illustrated as shown in figure 1.

Figure 1: Components of distance education



For the purpose of this dissertation the writer will define the following working definition for distance education, namely:

"Distance education is a form of education characterised by an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the student. The students are expected to have a reasonable standard of literacy and sufficient maturity to study by themselves, the use of two-way communication between the student and the educator, and the use of a combination of media in the teaching process".

Since the establishment of the UKOU in 1971 the term "open learning" has become very popular. Open learning has been described as an end whereas distance education is a means. Distance education has therefore been seen as a vehicle for open learning, which will be described in the next section.

2.3 6. The term "open learning"

There is certainly no shortage of definitions of open learning. Coffey (1977) in Rumble (1989, p. 65) defines open learning as:

“One in which the restrictions placed on students are under constant review and removed wherever possible. It incorporates the widest range of teaching strategies, in particular those using independent and individualized learning”.

In 1984, the Manpower Services Commission of the United Kingdom defined open learning as follows:

“Open learning arrangements enable people to learn at the time and place which satisfies their circumstances and requirements. The emphasis is on opening up opportunities by overcoming barriers that result from geographical isolation, personal or work commitments or conventional course structures which have often prevented people from gaining access to the training they need” (Rumble, 1989, p. 65).

Lewis and Spencer (1986, p. 9 -10) gave a rather different and wider definition of open learning, namely:

“Open learning is a term used to describe courses flexibly designed to meet individual requirements. It is often applied to provision which tries to remove barriers that prevent attendances at more traditionally courses, but it also suggests a learner-centered philosophy. Open learning courses may be offered in a learning centre of some kind or most of the activity may be carried out away from such a centre, for example, a home. In nearly every case specially prepared or adopted materials are necessary”.

Lewis and Spencer (1986, p. 9 -10) emphasises that:

"Open Learning puts the learner at the centre and works out from there". They go on to say that "all arrangements – learning materials, administrative contacts, support system - should work in the best interest of the learner, helping him or her to acquire greater autonomy." However, they also explain

that "sometimes what looks like closed characteristics are deliberately designed into a scheme for the benefit of learners. An example is pacing, used by providing the institution in some schemes to help learners to keep up".

These strands are given further prominence by Fricker (1988) in Rumble (1989, p. 65) who defines open learning as:

"an attempt to break down the traditional barriers to training such as pre-qualifications, age, geographical location, availability, scheduling, learning style and cost".

Rumble (1989, p. 66 - 69) also distinguishes between open learning and distance learning. He says that the two concepts deal with different things. Open learning is an approach to the objectives and character of the educational process, while distance learning is a means or a method by which education is provided. Therefore, open learning, can be face-to-face or at a distance or a combination of both.

According to Field (1994, p. 7) open learning:

"is used to denote both an educational philosophy and a set of techniques for delivering knowledge and skills. As a philosophy, open learning implies greater accessibility and student centredness: it implies placing learner rather than provider at the core of educational practice. As a set of techniques, it is characterised by the use of resource based teaching and training, often associated with the use of new communications media".

In his definition of open learning Race (1998, p. 7) describes open learning as:

"This is normally taken to mean provision for learners where they have control regarding how they learn, where they learn, when they learn and the pace at which they learn. Open learning sometimes also involves learners having some control of what they learn and how (or if) their learning will be assessed".

Race's definition highlights four kinds of freedom to the student, namely:

- freedom of pacing, for example year round enrolment and several examination opportunities a year;
- freedom of place and time;
- free and open access; and
- freedom to combine modules from different programmes.

The writer concludes that the main points made regarding open learning can be summarized as follows:

- recognition of prior learning;
- ensuring mobility of students between institutions;
- individualisation of mass education;
- flexibility and opportunity;
- a choice of medium or media, for example print, television, video or radio;
- a choice of place of study, for example, home, workplace or campus;
- a choice of pace of study, for example, closed paced or unstructured pace;
- a choice of support mechanisms, for example, educators on demand or video conferencing; and
- freedom of entry and exit points.

The writer concludes that the term "open learning" emphasises the need for and the ability to deliver openness, which implies open entry, open access, open curricula and open learning methods. Openness, however is a relative rather than absolute term, and it is by no means a universal characteristic of distance education institutions. Therefore, the writer concluded that open learning is an end, which should be pursuing in order to serve students better, while distance education is the vehicle for achieving this end.

The use of a combination of media in distance education has been emphasised in the working definition of distance education. The following section will deal with the different types of media available for instructional purposes.

2.4. MEDIUM OF COMMUNICATION IN DISTANCE EDUCATION

From the previous section, it is clear that distance education is more than printed materials only. The most important aspect of distance education is that it is dependent upon technology as a means of education. Since education takes place at a distance, some medium of communication must be employed to bridge that distance. The medium of communication available in distance education is extremely varied and not necessarily complex or sophisticated. Learning can take place via any medium and the choice is determined by its appropriateness to the material, the cost of delivery, the availability of facilities, and the number of students who will enrol for the course.

A variety of modes and systems can be used to deliver distance education. Many of these can be combined into multimedia packages that appeal to students with different learning styles. An evaluation of the advantages and disadvantages of the major types of technology used, follows.

2.4 1. Print-based materials

Print is the foundation of distance education and the basis from which all other delivery systems have evolved. The first distance delivered programmes were offered by correspondence study, with print materials sent and returned to students by mail. While technological developments have added to the repertoire of tools available to the distance educator, print continues to be a significant component of all distance education programmes (University of Idaho, 1999, p. 1). However, most programmes used a multimedia approach in offering distance education courses. It appears that instructional media will play a crucial role in the future development of distance education.

Table 1: Advantages and disadvantages of the use of print-based materials

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none">• Cheap and relatively easy to develop, store and distribute.• Portable and can be accessed at random.• Good reference material, if properly indexed and adequately outlined.• Long lasting.• Print material can be used where and when a student wishes to use it.• Useful in presenting detailed information.• A variety of diagrams, illustrations and pictures can be provided by print.• Ensures two-way communication between student and educator if there are assignments or other types of written communication required.• In combination with audio, video, computers and other media, print can be used successfully.• Newly developed technology is seen as a solution to the boredom of print-based instruction, because it simulates the text.• Even with the combination and/or the incorporation of other media, print will remain the dominant medium of distance educators to come.	<ul style="list-style-type: none">• Not all students are good readers.• Print can give only a vicarious experience of reality.• Print-based material as a medium relates to the way it is used, for example, poorly designed course materials.• Students may lose interest in their studies if they do not receive regular feedback on their assignments.• Print does not have the attraction of radio or television.• Printed material is not always student friendly.• Two-way communication in print is not easy to achieve.• If the postal service is not reliable, students will receive their material late and in a poor condition.• Print-based materials can be inaccessible to illiterate people.

Unisa (1997, p. 43 - 44)

2.4 2. Audio cassette

The audio cassette is one of the most effective and low cost methods that can be used to transfer ideas, entertain and teach. The audio cassette has been around for years and many distance education institutions have used it in the

past. Audio cassettes are popular because they are widely used for the distribution of music and motivational and instructional materials. Book publishers have also started to record most of their best selling books in audio cassette form. This has shown to be profitable for publishers.

Today people have easy access to cassette players even in the less-developed countries like Namibia. Despite the general popularity, audio is not widely used for distance education.

Table 2: Advantages and disadvantages of the use of the audio cassettes in distance education

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none">• Inexpensive to produce.• Multiple copies can be produced quickly and cheaply.• Can be taken along in a pocket and listened to while driving, walking or exercising outdoors.• Students can determine time and pace of study.• Together with print-based materials, audio cassettes are a powerful teaching tool. Can be used repeatedly.	<ul style="list-style-type: none">• Playback equipment is needed.• An effective and efficient production and distribution system is required.• Students might experience difficulty in finding places on the tape that need to be stressed and answered.• Without print backup, it is not easy to set up the tape and hunt for the right place in order to pick up on certain points.• In depth didactic conversation is difficult to achieve.

UNISA (1997, p. 45 - 46)

2.4 3. Telephone

The telephone is one of the primary communicating devices in many countries and its application in distance education is widespread. The greatest use of the telephone is in communicating with students and educators. Telephone contact can also take several forms, for example, a one-to-one tutorial or a group tutorial or sorting out a particular difficulty which is holding up the

students' progress and/or providing the reassurance, which the student needs to keep going.

The telephone can also be used as a form of teleconferencing. This implies that the telephone can be used to conduct a conference between a number of people at different locations using telecommunications and other supporting equipment to convey information between them. Teleconferencing further implies that all the participants are present at the same time. The links between all the participants may be by telephone or may include moving pictures (video conferencing), with a variety of aids for conveying graphics (Van Zyl, 1996, p. 90).

Another opportunity is the use of 0800 telephone numbers, which permit the students to phone the institution to get extra student support services and additional instruction. The institution will then be responsible for the telephone bills.

Table 3: Advantages and disadvantages of the use of the telephone in distance education

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none">• Direct one-on-one voice communication.• It is faster, more motivational and better matched to the attention span of the student.• Speed up interaction between the student(s) and the educator(s).• Used as a fax machine.• The telephone system can be used for computer communications.• Instructional materials can be exchanged on-line directly by modem through e-mail systems, if available.	<ul style="list-style-type: none">• In developing countries telephone services may be more expensive than in developed countries.• Not all students have access to telephones.• Teleconferencing facilities are not always possible because of their expensive nature.• Lack of visual stimuli in instruction.

UNISA (1997, p. 46)

2.4 4 Radio

The radio as medium of entertainment and information source has been in existence for over a century. The radio is nothing more than wireless audio. The radio is primarily used for entertainment and information. The radio has been used for adult education in many countries and is still a fast growing phenomenon in some developing countries like Namibia. In countries with low literacy rates the radio can play a very important role because it can to some extent replace print. The radio is a perfect method of transmitting instructional materials.

Postal delivery and telephone services in developing countries are often unreliable, making the radio an obvious alternative. According to Rumble (1986) in Verduin & Clark (1991, p. 65) radio broadcasting organisations in Latin America were among the pioneers of distance education. This trend is reflected in the structure of current systems where there is less emphasis on print and individual correspondence tuition and more on locally organised listening groups. In Australia interactive radio was successful because students were engaged in conversation with their educators by two-way radio (Verduin & Clark, 1991, p. 65).

Table 4: Advantages and disadvantages of the use of the radio in distance education

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none">• Cost-effective technology for reaching mass audiences.• Reaches people over wide areas.• Workbooks, text and other printed materials can supplement radio.• Relatively cheap and available in most developing countries.• Content of the radio programmes can be changed quickly if necessary.• Radios can operate on batteries, which makes them more flexible.• Useful in places where phone-in facilities might be available and serve as an interaction between student(s) and educator(s).• Debates, interviews and dramas can be offered to make learning interesting.	<ul style="list-style-type: none">• Some students do not learn well by radio.• Lack of a visual component.• Non-interactive nature of radio.• Broadcasting times may be inconvenient to students.• The student has no control over the radio.• The radio is almost always a one-way communication medium.

UNISA (1997, p. 44)

2.4 5. Television

Television is another term for video. Television can be defined as the presentation of video information by wireless transmission or by cable. Video can therefore be defined as material that has been recorded on tape or diskette for later presentation and distribution. Instructional material can also be transmitted live via the television. Because of the high costs of television transmission, its use by educational institutions is limited.

The following forms of television broadcast can be identified:

2.4.5.1. Broadcast television

In broadcast television, the signal is beamed through the air to television receivers without the use of wires or cables. In most developing countries people do not have access to television sets or a small percentage of people can receive television signals.

2.4.5.2. Cable television

Cable television is very popular and cheap in the USA. In 1990 there was an 80 percent penetration of cable television in homes in the USA, which makes television a far better medium for educational purposes in that country (Verduin & Clark, 1991, p. 67). Cable television signals must be boosted and rebooted, which increases not only signal power but also the noise in the signal. At some point, there is too much noise in the transmission for the signal to be considered of acceptable quality. This gives cable systems an effective operating limit of sixteen to thirty-two kilometers. Interactive cable television would allow individuals to access programmes and talk with the instructor, as do groups in central sites (Verduin & Clark, 1991, p. 68 - 69).

2.4.5.3. Telecourses

Telecourses are a combination of video, text and television to provide educational courses or information to distance students via television. Cooperation between public television stations, universities, colleges and independent producers to develop new programmes is important to ensure success. The main criticism against telecourses is that telecourses can be poorly produced and that telecourses can follow a talking-head format.

The production of telecourses should therefore be of a high quality to be effective. Television and video producers as well as educational experts

should be involved in the development of telecourses. Telecourses have the potential to make higher education available to thousands of working adults.

2.4.5.4 Microwave broadcasting

Similar in range to cable television but able to reach non-wired sites, instructional television-fixed services use lower power microwave broadcasts to serve sites up to forty kilometers from the studio. It can also be used for point-to-point television transmissions, used by television networks and stations. Microwave relay transmission is largely used by educational television systems like the Indiana Higher Education Telecommunication System and the Pennsylvania State University Learning Network (PENNARAMA) in the USA. PENNARAMA is the result of a consortium between the Pennsylvania State University and the State of Pennsylvania's Education Communications System. PENNARAMA uses thirty-one cable television outlets to reach the homes of over 700 000 cable television subscribers. Programmes are presented three times per week and repeated six times a day for students to watch at times convenient for them (Verduin & Clark, 1991, p. 70).

2.4 6. Compressed video

The Pennsylvania State University, Ohio State University and some other universities in the USA use digitised television signals in broadcasting. When "compressed", the signals take up less room, allowing the carrying of additional audio and data signals that may pay the cost of the video portion. Verduin & Clark (1991, p. 71) predict that integrated services digital networks, including compressed video, will supplement current analog telecommunications networks.

2.4 7. Aerial broadcasting

Aerial broadcasting was first used in the 1960s in an experiment in the USA. The Midwest Program on Airborne Television Instruction in the USA used an airplane circling at 7,7 kilometers to transmit instructional television programs to students at schools in six states in the USA (Verduin & Clark, 1991, p. 71). The experiment clashed with the interests of commercial television broadcasters who feared it would encourage profit “stratocasters” to broadcast from high in the atmosphere. With the development of the space shuttle, broadcasting from space is not impossible in the near future.

2.4 8. Satellite broadcasting

Satellite broadcasting is nowadays widely used for educational purposes throughout the world. Satellite transmission of instructional materials is one of the primary means of distributing educational materials in colleges, universities, business and industry. The materials are normally in video form and can be transmitted directly by “filming” a classroom session or by transmitting prerecorded video materials. The information is fed to a satellite up-link that transmits the video to a satellite that serves as a repeater. The satellite then transmits the video back to earth stations whose antennas are oriented towards the satellite. Normally some type of distribution fee is required (Frenzel, 1993, p. 28).

2.4 9. Video cassette

While slides and film have been used in the past, more recently video has been the preferred medium. Video is instructional material prerecorded on cassette tapes or videodiscs. Video is a successful medium because it links the audio and the visual together to provide a multi sensory experience for the student. The benefits of video are the ability for the student to play, replay,

pause and rewind to specific sections of the tape. Furthermore the duplication of videos is relatively cheap and the equipment for recording and playing is reducing in cost, increasing in quality and becoming more readily available.

Programmes that cannot be effectively taught by text can be taught by video. Short inexpensive videos make excellent enhancements to any programme (Frenzel, 1993, p. 30). Pre-recorded education videos are easily available and can be used successfully in combination with print-based materials.

The main advantage of this medium is that almost everyone can have access to a video cassette recorder. Twentieth century students were brought up in the television generation and video is one of the preferred ways of receiving information, news, entertainment, and even education. By using this method the instruction, retention and graduation rate of students can be improved.

2.4 10. Interactive video conferencing

Interactive video conferencing is an effective tool that may be used in distance education settings. This system can be integrated into the distance education programme with minimal adaptation to the curriculum and programme and is designed to support two-way video and audio communication between multiple locations.

Interactive video conferencing is commonly used to connect two locations using sophisticated computer technology. The core of video conferencing is the codec (coder/decoder). This is the electronic device that transmits and receives the video signals that the class members will see on their television monitors (Galbreath (1995) in University of Idaho, 1999, Guide 11, p. 2). The codec can also be seen as an extremely sophisticated modem. The modem takes digital data and transmits it over regular phone lines. The codec takes analog signals, compresses and digitizes them, and transmits the signals over

digital phone lines (Reed and Mosby (1996) in University of Idaho, 1999, Guide 11, p. 2).

Other types of equipment, such as television monitors, are needed to make interactive video conferencing successful. In addition, various forms of instructional technology can be incorporated into interactive video conferencing, including video cassette, recorders/players, microphones, cameras, and computers (Reed and Woodruff (1995) in University of Idaho, 1999, Guide 11, p. 2).

2.4 11. Interactive television

Interactive television has as its characteristic features as a one-way visual and two-way audio link between one central site and several geographical dispensed reception sites. Interactive television also includes the following media and telecommunications:

- audio conferencing by two-way telephone and/or radio links;
- audio graphics involving audio plus graphics conveyed by computer or other means;
- computer conferencing by people sharing personal computers or display terminals connected to a network;
- video conferencing with either a one-way video link or a two-way audio link, or both, a two-way video and audio link ; and
- print material exchange by fax or computer to support visuals (Van Zyl, 1996, p. 95).

Table 5: Advantages and disadvantages of the use of television related methods in distance education

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none">• Attractive medium of instruction.• Television gives a real feel of the time and place of the action.• Becomes a laboratory by providing detailed technical descriptions.• Demonstrates processes, skills and provides models of behaviour which educators and students prefer.	<ul style="list-style-type: none">• Complex method of communication.• Expensive medium, especially the start-up costs and overhead costs.• One-way medium of communication.• Television signals might not be strong in remote areas.• Students have no control over television.• Times of broadcasts might be inconvenient to the students.

UNISA (1997, p. 44 - 45)

2.4 12. Computers in distance education

In recent years, educators have witnessed the rapid development of computer networks, improvements in the processing power of personal computers, and advances in magnetic storage technology. These developments have made the computer a dynamic force in distance education, providing a new and interactive means of overcoming time and distance to reach students.

2.4.5.1. Computer application

Computer application for distance education fall into four broad categories, namely:

- Computer assisted instruction, implies the uses of the computer as a self-contained teaching machine to present discrete lessons to achieve specific but limited educational objectives. There are several computer assisted

instruction modes available, including, drill and practice, tutorial, simulations and games and problem solving.

- Computer managed instruction, implies the uses of computer's branching, storage, and retrieval capabilities to organise instruction and track student records and progress. The instruction need not be delivered via computer, although often computer assisted instruction (the instructional component) is combined with computer managed instruction.
- Computer mediated communication describes computer applications that facilitate communications. Examples include electronic mail, computer conferencing, and electronic bulletin boards.
- Computer-based multimedia, for example, hypermedia, and still-developing generation of powerful, sophisticated, and flexible computing tools have gained the attention of distance educators in recent years. The goal of computer-based multimedia is to integrate various voice, video, and computer technologies into a single, easily accessible delivery system (University of Idaho, 1999, Guide 7, p. 1).

The great advantage of the computer as a medium of instruction is that it is interactive. Students read the material, answer questions, work on problems or otherwise interact with the computer. Such interaction reinforces the material learned.

2.4.12.2. Electronic mail

Electronic mail (E-mail) is another computer-based communication method that has become widely used. Electronic mail is used primarily with computers that are networked together, and large multi-user computers. A large computer known as the server in a network acts as the host and provides storage areas, known as "mailboxes", for all of the users of the system. The E-mail system then permits users on the system to send mail to one another. This is usually in the form of short memorandums, notes and letters.

E-mail provides a convenient way of communicating with computer users. It is more expensive than the bulletin board system but very flexible. It can also be used to provide students with a variety of services and instructional opportunities.

2.4.12.3. Compact disk

The compact disk (CD) is a plastic disk containing audio recorded information in digital form. Although cassette tapes are still widely used, they are rapidly being replaced by CDs.

CDs have two major benefits, namely they produce high fidelity digital sound and have random access which is the greatest benefit for educational instruction. With an audiotape, access is sequential and time consuming while with a CD, the access is direct and instantaneous (Frenzel, 1993, p. 23).

2.4.12.4. Compact disk-read only memory

CD-ROM is the acronym for compact disk-read only memory. CD-ROM is an optical storage media for computers. This medium looks exactly like an audio CD, but is used to store computer data as well as digitised audio, video and graphics data. The CD-ROM is the key component in a personal computer based multimedia system.

Putting it into a special disk drive on computer accesses the data on the CD-ROM. Data is then selected through menus and icons, which are then displayed on the video monitor.

The benefit of a CD-ROM is its large storage capacity, which is 680 MB. This is the equivalent of over 300,000 printed pages. CD-ROM's are widely used to distribute large databases and reference materials such as encyclopedias. It

is also used for video, computer graphics, including graphics that use animation, and stereo audio (Frenzel, 1993, p. 23).

2.4.12.5. Bulletin board system

A bulletin board system (BBS) is a personal computer-based communications system that individuals may access with their telephones. A BBS operator sets up a computer system with special communications software. The computer is connected to the telephone lines by a modem. Other individuals with personal computers and modems can call the BBS system and be connected to the computer. The BBS system software permits individuals to communicate by leaving written messages for one another. BBS may also be used to distribute instructional or informational items. Software stored in the BBS computer can be downloaded to a user's system and vice versa. Bulletin boards are very popular in the USA. There are several thousand BBS's in the USA because of the low cost of such a system and because they can easily be implemented (Frenzel 1993, p. 23).

2.4.12.6. The Internet

The Internet is opening up so many new opportunities that it is hard to envisage the boundaries of this new medium. The Internet has been described as the "fourth medium" because it combines all the other media - print, radio and television - into a seamless multimedia. The key characteristics of the Internet can be described as borderless, convergent and interactive and as such it is starting to fundamentally alter the media landscape. Surfing the web ensures an active and interactive relationship, where the reader, and not the provider, is really in control. Global communication and access to information is a major advantage of the Internet (Coetzer, 1998, p. 100).

The Internet can also be used for electronic publishing. The advantage of electronic publishing is that the content can be delivered to readers within minutes. The readers can also provide feedback to the editor within seconds of reading an article. Furthermore, there are no printing or distribution costs involved and no delay in getting the information to the reader.

2.4.12.7. Facsimile

A fax machine is simply a way of communicating written and graphical images on a telephone line. The fax machine scans a piece of paper containing the information which is then converted into electronic signals that are transmitted over telephone lines. A receiving fax machine decodes the message and regenerates the image, which is then printed out on paper (Frenzel, 1993, p. 24). Fax machines or access to fax machine facilities are freely and easily available to individuals.

Table 6: . Advantages and disadvantages of computer application in distance education

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none">• Facilitates self-paced, individualised learning.• Facilitation of interactive instruction.• Immediate positive reinforcement and feedback can be given.• Graphics, electronic print, and sound can be utilised in a learning situation.• Allows individual control over time and length of study.• Quick access to sections of instruction.• Videodisc simulations can be used to provide practical training.• Electronic mail provides students with home computers to gain access to a variety of on-line information.	<ul style="list-style-type: none">• Access is limited due to the fact that only the relatively affluent will be able to afford computer-based distance education.• Home computer users must be motivated and proficient to work without the presence of an educator.• Students must be computer literate.• Limited computer access can restrict students' access to this medium of instruction.• Rapid development of new hardware imposes a prohibitive cost to continually update equipment and ensure the compatibility of software.

UNISA (1997, p. 47)

2.5. CONCLUSION

Distance education is a distinct field of education and is parallel to and a complement of conventional education in its own right. Distance education is also a needed component of national education systems worldwide. Distance education has its own didactic laws and characteristics that will require unique structures and administrative procedures from national institutions wishing to implement distance education.

It is possible to propose a coherent definition of distance education, which distinguishes it from other areas of educational activities. Distance education is a means of education that benefits both students and the institutions that

employ it. The key difference between distance education and conventional face-to-face education is in the delivery of the syllabus or educational content. On the distance education mode, the syllabus is delivered through well-designed courseware rather than lecturing. This implies a separation of time and location between educator and student. Although a significant proportion of communication between students and educators is not face-to-face, but takes place through the use of different media as necessary, this does not mean that distance education involves no face-to-face contact. Importantly, though, the face-to-face contact that does take place does not involve transmission of knowledge from educator to student, instead it involves various forms of student support, for example, tutorials, peer group discussions or practical work.

The strengths and weaknesses of distance education lie not in the method itself but in its application. It is a form of education that demands the proper design, production, and distribution of programmes geared to distance education objectives and taking into account all the special needs and requirements of programmes to be offered.

The distance education mode can only be applied successfully if provision is made for consistent communication between the supporting institution and its students. The array of possible communication technologies to be used in distance education is emphasised. There is a definite need for two-way communication in distance education. The medium to be used in distance education will depend on the approach to be used by the different institutions that intend using distance education.

Due to the growing importance of distance education, it can be concluded that the worldwide availability of distance education systems has enriched educational opportunities for citizens at the end of the 1990s. At the beginning of the new millenium crucial decisions face educational planners and

government institutions on the investment of taxpayers' monies in the provision of education. In this regard the different types of distance education models will be discussed in Chapter three.

CHAPTER 3

COMPARATIVE MODELS OF DISTANCE EDUCATION

3.1 INTRODUCTION

The various models of distance education can only be analysed if there is clarity about the context in which distance education will take place. In this regard, distance education has been defined in Chapter two as an educational process in which someone conducts a significant proportion of the teaching removed in space and/or time from the student. It has also been emphasised that distance education can only be effective if it uses a combination of media.

The type of institutions offering distance education will be determined within a web of economic, social, cultural and political circumstances. These circumstances will determine the choice between alternative ways of setting up a distance education institution. The purpose of this chapter is therefore to consider in more detail the various models in which distance education programmes are established. There are four components to this discussion, namely:

- classification of organisations;
- uses for distance education (the levels in which it operates);
- comparative models of distance education, and
- factors to be considered in choosing a model of distance education.

Throughout this chapter local, regional and international examples will be used to illustrate the use of the various types of models. A comparison will be made between free-standing institutions such as open universities, bimodal institutions, which teach both conventionally and at a distance, and co-operative arrangements between groups of institutions that collaborate either nationally or internationally. Figure 2 on page 70 gives an overview of the various types of models described.

3.2 CLASSIFICATION OF ORGANISATIONS

Carrying out an extensive task like distance education involves setting up of an organisational structure or model for the institution involved in distance education activities. Without this basic form of organisation public institutions are not likely to achieve their objectives.

Organisation is a consciously coordinated social entity, with a relatively identifiable boundary, that functions on a relatively continuous basis to achieve a common goal or set of goals (Robbins, 1990, p. 4). An organisation can therefore be seen as a coalition of stakeholders; and to survive and grow, an organisation must create value to satisfy the expectations of the stakeholders (Jones, 1995, p. 41). Jones (1995, p. 41) adds that the use of an organisation allows people jointly to increase specialisation and the division of labour, use large scale technology, manage the external environment, economise on transaction costs, and exert power and control - all of which increase the value the organisation can create.

The process of organisation, namely, organising means classifying and grouping functions and allocating groups of functions to institutions and workers in an orderly pattern so that workers aim at achieving the objectives (Cloete, 1991, p.

112). This implies that by means of organising, a specific organisation is created for a specific institution. An institution is therefore not an organisation, but to function properly it is dependent on good organisation.

For the purpose of this dissertation a distinction can be made between macro- and micro-organising, especially within the public sector. Macro-organising refers to the division of government activities into significant working spheres with the aim of achieving the political objectives of the government of the day, for example, government departments/ministries (Van der Waldt, 1999, p. 188). In terms of macro-organising government activities can be classified according to the following criteria:

- classification according to commonality of functions, for example, government department/ministries such as Health and Social Services, Education, Justice and Home Affairs;
- classification according to geographical area, for example, provincial, regional and local administrations;
- classification according to the product or service to be rendered, for example, parastatal institutions and government cooperations; and
- classification according to the domestic nature of the function, for example, government departments/ministries responsible for auxiliary services such as personnel, stores, financial and transport activities (Roux, 1997, p. 47 - 50).

Micro-organising on the other hand, entails organising within a public institution and refers to the division and allocation of functions to employees. According to Cloete (1998, p. 121 - 128) micro-organising entails the following activities:

- horizontal division of work;

- assignment and delegation of authority
- coordination
- setting channels of communication; and
- control.

In terms of macro-organising, public distance education institutions are set up to render a specific service or product, namely providing educational opportunities via the distance education mode to the citizens of any given country. In this regard several comparative distance education models will be identified and described by the writer. Each distance education institution also makes provision for micro-organising, which refer to the division and allocations of functions to the employees within that specific institution. However, before describing the different distance education organisation/models, the uses for distance will be explained in the next section.

3.3 DISTANCE EDUCATION IN DIFFERENT EDUCATIONAL SECTORS

Distance education methods are used across the full range of education and training sectors. While the role of distance education in higher education and in vocational training is clear and growing in status, its role in schooling and adult basic education is often questioned. Distance education is provided at five main educational levels, namely:

- as an alternative to formal schooling;
- for teacher training;
- at higher education level;
- in non-formal education; and
- for technical/vocational training.

Each one of the five educational levels will be discussed to illustrate its role in education and training activities. Firstly distance education can be viewed as an alternative to formal schooling.

3.3 1. An alternative to formal schooling

Distance education can be used as an alternative to formal schooling in the form of:

- second-chance programmes for adults; and
- schemes for school-age children.

Regarding the training of adults the Allama Iqbal Open University in Pakistan, for example, though it focuses mainly on teacher education, spends a great deal of time and money on non-formal programmes and adult basic education such as its 18-month village projects that emphasise literacy and the skills needed for rural employment and rural development (Moore, & Kearsley, 1996, p. 225).

In Australia, correspondence courses from kindergarten through to the final year of formal schooling were arranged for children in the outback as long ago as during the First World War. This gave rise to the use of radio in 1929 and a school of the air in 1951. In India, the Open School was set up in 1979. The aim of the Indian Open School is to accelerate the provision of basic education for all and to serve as a model of cost-effective alternatives to secondary education. In Zambia, a correspondence unit was established in 1964 to increase access to secondary school education, until then only twelve percent of primary school children were getting a place in a secondary school (Directorate: Distance Education, 1996, p. 31).

Within Namibia, NAMCOL was established in 1997. The main purpose of NAMCOL is to provide educational opportunities for adults and school leavers who have missed out on formal schooling or who dropped out of school because of failure or due to unforeseen circumstances, for example, pregnancy amongst female students. NAMCOL is also investigating the possibility of increasing the scope of its activities to include vocational training in order to equip adults with the skills they need to find and/or create work. Distance education can also be viewed as a cost effective way of providing training for teachers.

3.3 2. Teacher training

Teacher training is one of the most widespread purposes for which distance education has been adopted for the following reasons:

- the huge demand for education and a consequent shortage in the supply of teachers;
- not having to remove teachers from their schools, saving on resources and bringing immediate benefits to classrooms;
- the fact that teachers are assumed to already possess study skills and are therefore likely to succeed as distance students;
- ability of school boards to provide teachers with motivation to study, for example, promotions and wage increases; and
- the ability to overcome problems faced by teachers in remote schools (IEC Learning KIT, 1997, Topic 3, p. 2).

Teacher training through distance education has taken three forms, namely:

- upgrading of existing primary school teachers;
- initial training of primary school teachers; and

- upgrading of secondary school teachers.

In developing countries an effort is often devoted to the upgrading of teachers' skills by means of distance education. The pioneer of this approach in Africa was the University of East Africa in Nairobi, Kenya, today known as the School of Distance Studies at the University of Nairobi. Established in 1969 with assistance from the University of Wisconsin, what was then called the Correspondence Courses Unit retrained and graduated some 10 000 unqualified teachers between 1969 and 1972 (Moore, & Kearley, 1996, p. 225). Other related examples are the Emergency Science Program in Guyana, the Northern Integrated Teacher Education Programme in Uganda, and the strengthening Primary Education Programme in Kenya.

Within Namibia, examples of the training and upgrading of existing primary and secondary teachers' skills through the distance education mode are the offering of the Basic Education Teachers Diploma (BETD) by the three colleges of education in Namibia and part of a bachelors degree in education by UNAM.

A popular view is to link distance education to the training of students at higher education level.

3.3 3. Higher education training

A major factor affecting higher education worldwide is a trend towards massification of higher education. Because of increases in population, increased demand for skilled work and an increase in the political power of ordinary people, there is a rising demand where the state provides access to higher education for increasing numbers of young people. Because of the above-mentioned reasons, technical, professional, and academic institutions of higher education have to

consider distance education as a means of providing flexible and cost-saving access.

The use of distance education at the higher education level can be done through one of the following modes, namely:

- single mode institutions;
- dual (bimodal) institutions;
- mixed mode institutions; and
- consortia and other co-operative arrangements.

Besides formal training of students at institutions of higher education, distance education is also viewed as non-formal education.

3.3 4. Non-formal education

Distance education can also be used as a tool in non-formal education in the following areas, namely:

- rural and social development. In Cameroon the "Institut Africain pour le developpement economique et social-formation", is involved in rural and social upliftment and development of the community through distance education; and
- literacy and health training. The radio school of Latin America and Australia are well-known examples in this regard (IEC Learning Kit, 1997, Topic 3, p. 2).

Besides formal and non-formal education, distance education is also used for technical and vocational training of students.

3.3 5. Technical and vocational training

The offering of technical and vocational courses through distance education is gaining momentum. This type of training also includes workplace-based learning and employer-sponsored schemes. In Southern Africa, the Technical College of South Africa, is an example of a technical and vocational distance education institution.

3.4 COMPARATIVE MODELS OF DISTANCE EDUCATION

There are a number of ways of setting up a distance education model. At the risk of over-simplification, these alternatives can be reduced to the following organisational models:

- free-standing models;
- a department within an existing teaching institution;
- a co-operative arrangement between several institutions; and
- hybrids.

A comparative description of each model will follow to illustrate the characteristics and functions of each model. Figure 2 gives a schematic representation of the different models described.

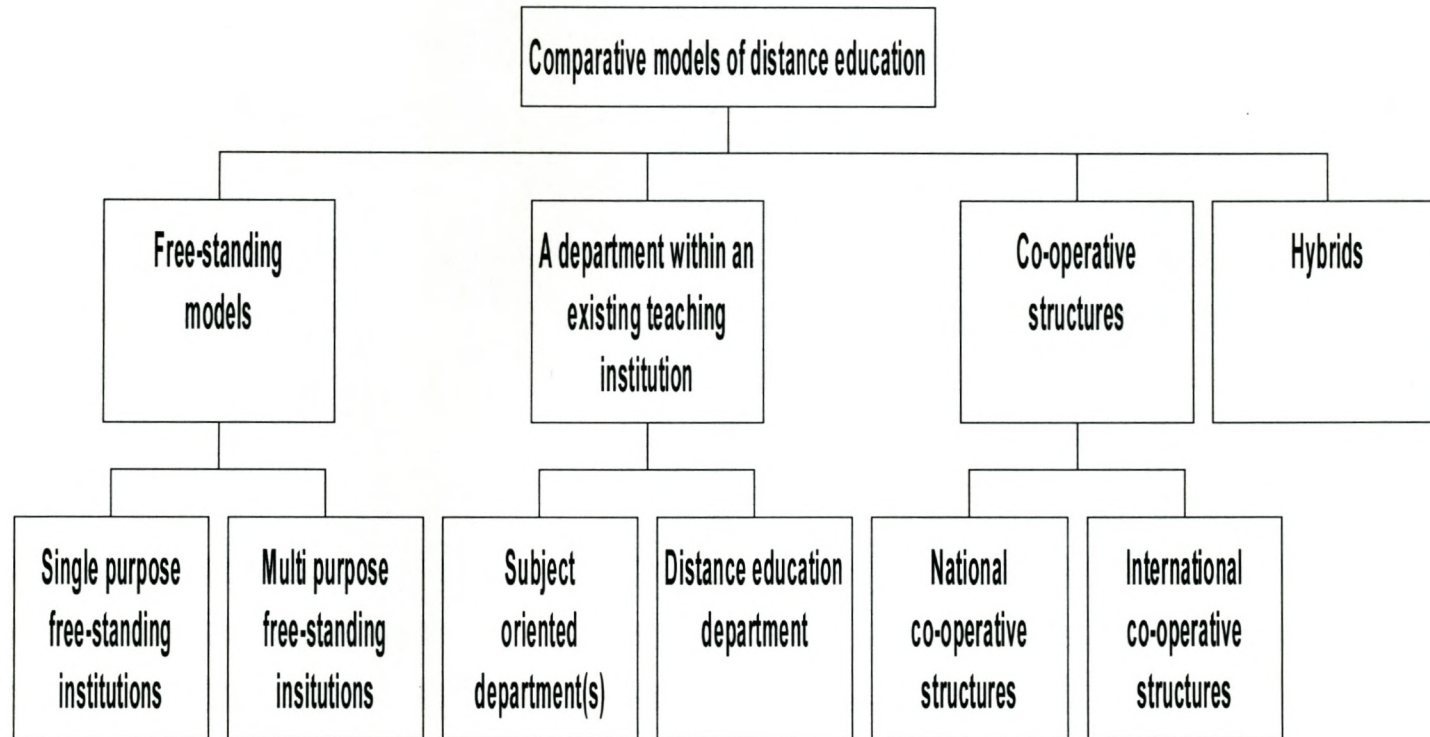


Figure 2: Comparative distance education models

3.4.1. Free-standing models

The choice of a free-standing model assumes that the institution will itself undertake the following distance education functions:

- designing educational programmes, including acquiring and developing courseware material;
- tutoring and counselling of distance students;
- awarding credit for formal education programmes;
- production, storage and distribution of courseware material;
- keeping records of students' inventory;
- administration and finance;
- marketing programmes and recruiting students; and
- evaluating programmes and processes.

Free-standing models are usually autonomous and have distance education as their dominant or sole function. Free-standing models can be categorised into two types of institutions, namely:

- single-purpose free-standing institutions; or
- multi-purpose free-standing institutions.

3.4.1.1. Single purpose free-standing institutions

Single purpose free-standing institutions can be defined as distance education institutions which have been set up to teach a single subject, or only one programme, for example, a programme in teacher training. An example of a single-purpose free-standing institution is the William Pitcher College in

Swaziland. The College was established to provide distance teaching programmes for the in-service training of teachers.

In South Africa, various forms of private and public institutions can be classified as single purpose free-standing institutions. Popular programmes available through private institutions in South Africa are secondary school, vocational/professional and non-vocational programmes. Private colleges involved in distance education in South Africa vary in scope and size. Some of the colleges offer programmes in all of the above fields while others specialise in particular fields of interest. The College of Public Administration of Southern Africa, for example, offers programmes only in the field of public administration, while the School of Modern Photography offers a single programme in photography.

Regarding teacher education through distance education, there are a number of different types of providers in this sector in South Africa. Approximately 130 000 students (nearly one third of South Africa's teachers) were enrolled in teacher education at a distance in 1995. This sector is expanding rapidly, experiencing a 23 percent increase in new enrolments between 1994 and 1995. Most of this expansion has been concentrated in two providers, namely, the College of Education of South Africa, with a 149 percent increase in new enrolments and Success College which registered 7 403 students in its first year (Directorate Distance Education, 1996, p. 106).

In Namibia, NAMCOL can be identified as a single purpose free-standing institution. NAMCOL is a state-supported educational institution established by an Act of Parliament, namely the Namibian College of Open Learning Act 1997 (Act 1 of 1997). NAMCOL currently offers programmes leading to the Junior Secondary Certificate (Grade 10) and the IGCSE, (Grade 12). Students can opt

to study through either the distance education mode or by means of afternoon/evening classes at a face-to-face tutorial centre. In addition NAMCOL offers the Certificate in Education for Development course in conjunction with the UNISA Adult Basic Education and Training Institute for those involved in the field of adult education, community development, or extension.

Since 1994, the number of students enrolled with NAMCOL has grown four-fold to the level of almost 20 000 in 1999 (NAMCOL, 2000, p. 2). This makes it the largest educational institution in Namibia in terms of full-time equivalent students. The majority of these students live in rural areas of Northern Namibia or in severely disadvantaged urban areas.

3.4.1.2. Multi-purpose free-standing institutions

Multi-purpose free-standing institutions can be described as free-standing institutions offering courses of various kinds and at various levels through the distance education mode only. These institutions can also be classified as single mode institutions. Examples of multi-purpose free-standing institutions include:

- open universities, such as the UKOU, Indira Gandhi National Open University in India, UNISA in South Africa, Technikon Southern Africa (TSA) in South Africa and others;
- open colleges which offer courses at a number of levels such as the Tanzanian National Correspondence Institute and the National Extension College (NEC) in the United Kingdom working under the auspices of a Ministry of Education and offering courses at various levels; and
- open schools such as the Open School of India (IEC Learning Kit, 1997, Topic 3, p. 3).

Multi-purpose free-standing institutions teach only at a distance. These open universities/institutions represent the final democratisation of the concept of a university by opening the possibility of university studies to students who were previously not allowed to enrol due to the time-tabling of educators and the necessity of set periods of research at the universities' facilities. Full-time workers, the disabled, imprisoned and hospitalised together with those tied to the home, can now enrol at a university, if it teaches at a distance (Keegan, 1993, p. 67).

Multi-purpose free-standing institutions or single mode institutions were created to redress the problems of the traditional face-to-face system, whether problems of scarcity or of access. In this regard single mode institutions are "the top-of-the-line" in distance education. Multi-purpose free-standing institutions are unencumbered by conventional classroom teaching, which allows them to focus on developing and managing distance education programmes. Autonomy and programme control rest with the institution, educators and administrators. All systems are therefore focussed on the distance education student. All costs in the single mode institution are assigned to distance education, and economics of scale become economic realities for survival of the institutions (Croft, 1992, p.54 - 55).

3.4.2. A department within an institution of higher education, for example, colleges or universities (bimodal or mixed institutions)

Institutions of higher education might decide to set up a distance education department, which works alongside other departments specialising in distance education but within an otherwise conventional institution. Bimodal or dual modes offer two distinctive kinds of courses, one using traditional classroom-based methods and the other distance methods. Students enrolled in one of these

modes may or may not be allowed to cross over to take courses in the other mode. Characteristics of bimodal institutions are:

- the structured learning materials prepared by course teams provide consistent quality of instruction to both off-campus and on-campus students;
- self-instructional materials encourage learning through activities and independent learning;
- students are liberated from the constraints of the traditional lecture and tutorial system and can move from one mode to another according to their needs;
- students benefit from the esteem that comes from a conventional institution and demonstrated parity of standards; and
- staff is freed to teach in more interactive ways (IEC Learning Kit, 1997, Topic 3, p. 5).

The majority of traditional institutions of higher education that are engaged in distance education operate on a dual mode. These institutions teach some students on-campus and some at a distance. Dual-mode institutions can take several forms among which two distinct variants can be clearly identified, namely:

3.4.2.1. Subject-oriented departments

Institutions of higher education can also make provision for academic departments that teach students both on-campus and at a distance. In this approach, internal and external students often follow the same course, albeit that the mode of teaching is different, take the same examinations, and receive the same qualifications. An example of this approach is the University of New England in Australia.

Often there is a separate department or support unit responsible for the organisation and administration of distance education courses, that is, for activities such as the production and dissemination of course materials and for the arrangement of tutorial or summer courses (Curran, 1992, p. 60). Some institutions of higher education offer distance education in one department only, for example, at the University of the South Pacific in Australia, where the Department of Education launched the first distance education programme for teacher education. Soon after that the university began to teach other subjects through the distance education mode (Perraton, 1991, p. 14).

3.4.2.2. Distance education departments

Institutions of higher education may establish a separate department for distance education with the responsibility for planning and running distance education within a bimodal institution. There are variants within this model which include the following:

- distance education departments that are purely administrative with no teaching functions, for example, the University of Zambia can require staff to teach both face-to-face and at a distance but the specialist department only co-ordinates and distributes courseware;
- specialist distance teaching departments that have a pedagogical function, for example, Murdoch University in Australia had a specialist department that did not employ its own subject specialists but had staff with educational skills in distance education who played a role in the development and use of materials which went beyond the purely administrative activities; and
- external teaching departments with their own subject-specialist staff concerned only with external students, for example, the University of

Wisconsin Extension Centre in the USA has a staff of well over 1 000 administrative and academic staff and a full range of academic departments which exists in parallel with the University of Wisconsin (Perraton, 1991, p. 14 – 15).

In spite of their wide distribution, dual-mode institutions have not been evaluated and analysed in the same depth as open institutions and reliable data on their scale of operation and costs is sparse. There are wide differences between dual-mode institutions and open institutions in respect of factors such as the range of subjects taught and the modes of teaching. With regard to teaching, some dual mode institutions provide distance taught students with little more than transcribed lecture notes, supported by assessment through marked assignments. The bimodal institutions are more like small scale open institutions using a course team to develop course materials and a multi-media approach to teaching, providing a high level of student support and counselling sometimes through the medium of advanced communications technology. Some dual mode institutions allow students to study for a qualification entirely at a distance, for example, the University of New England and Macquarie University in Australia, while in others only part of the qualification is taken in this mode (Curran, 1992, p. 60). The strengths and weaknesses of dual mode institutions can be summarised as follows in table 7.

Table. 7: Strengths and weaknesses of dual mode institutions

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• Residential faculty is involved in research, design and development of distance education course material.• Faculty members can teach both in the classroom, and at a distance. This implies that students will use the same course material.• Students' ability to move between classroom education and distance education is more flexible.• Allows a broadening of the curriculum.• Using external experts will add to the resources of the institution with little direct cost.• The course team development approach acts as a professional development tool for educators involved in the teaching and learning of distance education students.• Continuation of the courses offered when educators are on leave or when enrolment exceeds expectations .	<ul style="list-style-type: none">• Inflexibility in terms of policies relating to admission, registration, course change and withdrawal, the purchasing of textbooks and the borrowing of library resources results in built-in restrictions for distance students.• Limited decision making autonomy in areas like enrolment, administrative systems, instruction, and territorial rights of services.• The department/unit/centre involved in distance education has little or no power to adapt to changing circumstances• No formal institutional commitment to either the development or the delivery phase of distance education.• Only junior educators undertake distance education development as it is seen to be a second-rate, low-level job.• Distance education activities are conducted as overload work.• Course development at dual mode institutions are simply a compilation of lecture notes, written by educators, with no assistance from instructional designers or editors and no review by peers.• The use of non-traditional communication technology in distance education is often seen as a major threat.• Technical obstacles experienced due to the quality of the technology used.• Students, educators and administrators experience a fear of change, a fear of

	technical concerns about job security, concerns about the manner in which technologies may influence learning, a resistance to learning new things, the worry that students may not adapt, and scepticism about the ability of the technologies to deliver what they promise.
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(Croft, 1992, p. 54 - 58)

Distance education in a dual mode institution has some basic requirements for success. These are:

- the administrative unit must have the same level of authority and decision making as other academic departments;
- the unit must have the same type of authority to set up its own procedures and policies;
- other units in the institution must be willing to co-operate;
- adequate numbers of well-trained staff must be available; and
- a sound funding base must be provided on a constant basis, under the control of the unit (Croft, 1992, p. 58).

Dual mode institutions will be successful where they have established a well-supported distance education unit with its own educational staff who can remain close to the conventional work of the institution but can bring pedagogical expertise to the development of distance education.

3.4.3. Co-operative structures

In these models, institutions work together to teach students and distribute the various functions between them. The co-operative arrangements or consortium approach to distance education is not very common. From an organisational point of view, consortiums of institutes of higher education differ fundamentally from autonomous open institutions. The academic and organisational responsibility for the distance programmes belongs to the institutes of higher education, and not to a central organisation as is the case with autonomous open institutions of higher education.

The general principle of consortia is that a number of tasks are organised centrally, in particular, tasks which require scale effects of co-ordination among the participating institutes, for example, joint course development (where course teams will include the top experts from the member institutes), for international co-operation, and for the promotion of distance education via the mass media (Degreef, 1993, p. 37).

In the consortium model, distance education itself is organised by the traditional universities and institutes of higher education. They enrol the students, provide student support, examine the students and certificate them. According to the consortium model, the institutions use the mainly centrally developed course materials which are appropriate for distance education study and organise the distance education curricula and examinations in such a way as to address the needs of distance students.

Consortiums differ from one another. A distinction can, however, be drawn between two types of co-operative arrangements or consortia. These are:

3.4.3.1. National co-operative structures

Different partners can carry out the functions of curriculum and course development, student support, examination and certification. According to Curran (1992) in Degreeef (1993, p. 38) the co-operative approach to course development in distance education provides a means of drawing on a wide range of academic expertise that normally would not be available in any single institution. Through this co-operative approach, the entire curricula can be developed in a coherent manner on an industrial scale by the member institutions without wasting human resources or financial means. Not only is it a basis for a more cost-effective programme, but the active co-operation of other institutions facilitates the participation of students from all regions of the country and the use of course material by the institutions in their standard programmes. Together with the transparent approach to course development and teaching, it effectively removes any problem of acceptance of the academic quality of the course. Examples of national co-operative structures are the following:

- the Open Learning Foundation is a consortium of tertiary-level institutions in the United Kingdom which produces course material packs that are available at a discount to member institutions and at full price to non-member institutions;
- the NEC in the United Kingdom produces "flexi-study" packs of learning material which colleges can purchase for their own use, with advice from NEC on running distance education schemes; and
- the Chinese Television University in China produces material, which is used by a federation of universities that provide tutorial support to back the centrally produced courses (IEC Learning Kit, 1997, Topic 3, p. 6).

In a national co-operative model the functions of preparing materials, giving tutorial support to students and awarding credit may be carried out by different partners, for example, the Massey University in New Zealand. Massey University in New Zealand is a mixed-model institution, teaching its own campus-based and external students, from other New Zealand universities. Any New Zealand university can exempt a country student from attending classes but where Massey University offers an extramural course in the subject, the student is required to register for tuition in the Massey course, follow its teaching, and sit its examination. Passes gained on the course are credited to the students' home university as if the teaching had been provided there. This interchangeability of internal and external credits and use of Massey courses for credit at other universities has won confidence for Massey extramural courses from other universities (Prebble, 1995, p. 2 - 3).

Co-operative arrangements need not be permanent, or all-purpose for example, in Australia, three universities co-operated on the development and running of a degree-level course where it would have been difficult for any one of them to offer the course on its own, and where the universities were not working together on the whole range of programmes (IEC Learning Kit, 1997, Topic 3, p. 6).

In South Africa, the three dedicated higher distance education institutions, namely Vista University, UNISA and TSA, have formed the Confederation of Open Learning Institutions of South Africa (COLISA). In terms of its constitution COLISA is a confederation of three separate institutions that remain autonomous members of a body, which aims at closer co-operation. The members remain autonomous at an operational level and collaborate by consensus on a strategic level. The mission of COLISA is as follows:

COLISA as a confederal body of higher educational institutions will provide separately and jointly comprehensive and quality learning opportunities in terms of open learning principles, within a flexible learning system. These will be achieved by:

- facilitating synergistic ventures in teaching, research, community service programmes and administrative systems,
- to realise economics of scale and effective use of resources so as to create a culture of lifelong learning in higher education; and
- to meet students' expectations and the future needs of global and competitive society (Labuschagne, 1998, p. 2 - 3).

The main areas of inter-institutional partnerships between the three institutions are:

- the sharing of facilities;
- joint staff development;
- integrated administrative services;
- learner support;
- technology provision;
- courseware design and development; and
- a menu of academic offerings from which a student can select what best suits his/her needs.

As indicated in Chapter 1 page 4, there are four publicly-funded institutions involved in distance education programmes in Namibia, namely, NAMCOL, UNAM, PoN and NIED. In late 1997, an external consultant carried out a critical review of distance education programmes at the request of the MHEVTST and

the Working Group on In-Service Training of Teachers and School Managers. The report recommended, *inter alia*:

- that MHEVTST and MBEC jointly established a body that will review and coordinate the distance education offerings of public institutions in Namibia to ensure these offerings overlap to the minimum extent possible and that support services are provided collaboratively;
- that such a body include at least representatives from each ministry and each of the institutions involved;
- that it be empowered to review existing and planned distance education programmes from public institutions in Namibia and to ensure effective coordination among the provider institutions is achieved (Du Vivier, 1999, p. 12).

The recommendations made in the report were endorsed by both ministries of education in 1997. This resulted in the establishment of a high-level Steering Committee to guide the process. In addition, a Working Group was assigned the task of investigating practical ways in which the institutions could coordinate their distance education programmes and collaborate in the provision of services to students. The outcome of these efforts resulted in the partner institutions established a charitable and educational trust to be known as NOLNeT in June 2001, which will act as the legal vehicle for joint initiatives. The partner institutions co-operate in terms of:

- minimising overlap or duplication of courses;
- eliminating competition of courses and facilities;
- maximising potential economics of scale;
- eliminating competition for qualified staff (both full- and part-time);
- making the best use of new and existing infrastructure;

- improving courseware design and production;
 - improving student support services;
 - enhancing staff development (including part-time and contract staff;
 - maximising capacity for research and development; and
 - enhancing public perceptions of the value of distance education
- (Du Vivier, 1999, p. 13).

3.4.3.2. International co-operative structures

Co-operation between institutions of higher education is also possible across national frontiers. In this regard, the Commonwealth Heads of Government agreed in 1987 to set up the Commonwealth of Learning (COL). The purpose of the COL is:

- to promote co-operation in distance education within the Commonwealth member countries;
- to facilitate the sharing of resources among Commonwealth member countries;
- to facilitate the sharing of resources among Commonwealth colleges, universities, and other educational institutions throughout the Commonwealth;
- to make use of the potential offered by distance education; and
- the application of communication technologies to education (Connections, 2000, p. 1).

The COL activities aim to strengthen the capacity of members to develop the human resources required for their economic and social development and will give priority to those developmental needs to which commonwealth co-operation can be applied. The COL will work in a flexible manner and be capable of

responding effectively to changing needs. It will serve the interests of Commonwealth member countries and of the Commonwealth itself working in co-operation with governments and other Commonwealth agencies and educational institutions and will do so in a way that is consistent with the principles that have guided the Commonwealth. In performing its functions, the COL will seek to ensure the appropriateness of programmes and of distance-education techniques and technologies to the particular requirements of member countries (Connections, 2000, p.1).

Several other international institutions have been established to promote international co-operation in distance education. Examples are:

- the "Consortium a International Francophone De Formation a Distance", set up with support from Canada and France with broadly comparable objectives to those of the COL;
- the European Association of Distance Teaching Universities working on the sharing and joint development of teaching material; and
- the "Consortio - red education a distance", which links distance teaching organisations throughout the Western Hemisphere (IEC Learning Kit, 1997, Topic 3, p. 7).

Within the Southern African region there is also co-operation between various country institutions that are involved in distance education. In 1971 the Botswana, Lesotho and Swaziland Correspondence Committee set up a forum for exchange of information and to develop ways of co-operation to avoid wasting resources. With time, membership of this body grew with institutions involved in distance education joining, for example, the South African Committee for Higher Education, the Lesotho Distance Teaching Centre and the Botswana Extension College. A formal change of name from the Botswana, Lesotho and Swaziland Correspondence Committee to the Distance Learning Association took place in

1979. The name later changed to the Distance Education Association of Southern Africa (DEASA). Presently membership includes Botswana, Lesotho, Swaziland, Namibia and South Africa (DEASA Newsletter, 1998, p. 1).

The aims and objectives of the DEASA are:

- to provide a platform for discussing issues related to and affecting the field of distance education;
- to encourage the exchange of expertise among member institutions as efficiently and widely as possible;
- to exchange information and materials on distance education and to promote co-operation among member institutions;
- to promote educational activities and opportunities for those who are not part of the conventional education system;
- to promote assistance from national governments and international organisations to distance education;
- to collaborate with governmental as well as non-governmental organisations to promote effective distance education policies, methods and practices;
- to represent and promote to governments and funding agencies the interests of distance education as a set of learning and teaching methods and practices that require particular interventions and cost allocations; and
- to encourage members to maintain the DEASA's Code of Ethics in advancing distance education (DEASA Constitution, 2001, p. 2).

To date, the above-mentioned international co-operative organisations are not enrolling distance education students directly but are providing services to back up the work of national institutions. The strengths and weaknesses of co-operative structures are summarised in table 8 as follows:

Table: 8: Strengths and weaknesses of co-operative structures

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• Reducing territoriality and competition amongst member institutions.• Member institutions can combine distance education and continuous education programmes.• Agreements can be made with autonomous open institutions relating to the use and/or exchange of courses or the exchange of students.• Member institutions can involve themselves as national partners in international organisations.• It is easier for consortiums to co-operate with other educational and training organisations for setting up national or international networks for distance education.• Programmes and course material produced can be used in the traditional face-to-face system.• Academic co-operation results in academic knowledge becoming more standardised throughout the institutes.	<ul style="list-style-type: none">• Member institutes may be more supply-oriented than need-oriented, resulting in programmes and courses not adapted well enough to the needs of the individual adult student.• Distrust of other peoples' "teaching".• Different philosophies which are reflected in the adoption of faculty-based or school-based organisational structures.• Failure of all departments to participate in distance education, even in those universities with the strongest commitment to external studies.• Different means of organising the distance education programmes.• Use of different media and approaches to the design of the teaching package.

(Degreeef, 1993, p. 39 - 40)

3.4.4. Hybrids

The models outlined above are somewhat arbitrary, and there are both possible and actual hybrids between them. In several cases, an institution has broader functions than this account of models might suggest. In this regard the following examples can be identified:

- the Indira Ghandi National Open University in India serves both as an autonomous institution and a co-operative body where it has co-ordinating and funding responsibilities for other Indian open universities;
- the Lesotho Distance Teaching Centre in Lesotho and Tanzania National Correspondence Institute in Tanzania are multi-purpose institutions but in their teacher education programmes work within a co-operative framework that might be labelled a "national co-operative" model (Perraton (1991) in IEC learning Kit, 1997, Topic 3, p.7).

In addition, a distance education scheme may be mounted by an organisation that is quasi-autonomous, free standing in some ways but not in others because it is one component of a multi-campus, statewide or nationwide institution. The "Tele-Universite of Quebec" in Canada is one institution among several that comprise the Universite de Quebec. Another example in this regard is the Empire State College in New York which forms part of the State University of New York system (IEC Learning Kit, 1997, Topic 3, p.8).

There is, however, another variant of the distance education programme that is not yet institutionalised but is rather organised as a project, usually under the auspices of a government ministry. These distance education programmes may or may not become an established component of the overall provision of

education overseen by that ministry. The following serve as examples in this regard:

- Athabasca University in Canada operated as a project of the government of the Province of Alberta for a number of years before being chartered as a fully fledged university; and
- in addition, there are several upgrading schemes for primary teachers, which are operating under the auspices of ministries of education, as projects funded by donor agencies, and are not yet formally institutionalised. Examples include the Northern Integrated Teacher Education Project in Uganda and the Strengthening of Primary Education project in Kenya (IEC Learning Kit, 1997, Topic 3, p. 8).

The most challenging variant in distance education programmes is the African Virtual University (AVU). This is a World Bank sponsored unit initiative to provide distance education services from universities in the USA and other countries to universities in Africa and from African universities to other African universities using satellite services. It is the first of its kind of interactive-instructional telecommunications network established to serve countries of Sub-Saharan Africa.

The system will provide satellite transmission and reception of live and taped university level education programmes, continuing education and remedial programmes. Communications between the originating and receiving universities will initially be accommodated via dial-up telephone lines while Internet access will be provided via Internet Service Providers in the receiving countries (Baranshamaje, 1997, p. 1).

3.5 CHOOSING A STRUCTURE

There are a number of factors, which influence the choice of model. For the purpose of this dissertation only four of these are discussed, namely:

3.5 1. The scale of the educational needs

If the intent is to recruit students in large numbers, it may be unrealistic to consider anything other than an open university with a full range of functions. Several open institutions are labelled "mega-universities" because they enrol 100 000 students or more. Examples include the UKOU, Sukhothal Thammarthirat Open University in Thailand, "Universitas Terbuka" in Indonesia and UNISA in South Africa.

On the other hand, it would not make sense to set up such an institution if the intention was to recruit only a thousand students. In Malaysia, doubts about the viability of degree-level distance education led to the choice of a bimodal approach with the off-campus programme of "Universiti Sains Malaysia" recruiting students in hundreds rather than thousands (IEC Learning Kit, Topic 3, p. 9).

3.5 2. Educational purpose

Where the purpose is narrowly defined, for example, the upgrading of primary school teachers, the choice is likely to be limited to a single-purpose distance education institution, a department within an existing institution, or a co-operative scheme. The level at which the scheme is to work will be important, for example, it may be difficult to set up a unit within another institution if the parent institution has no experience of teaching at the level concerned. However, there are

significant exceptions in this regard, for example, the Matriculation Programme for Women is a very successful offering at the Allama Iqbal Open University in Pakistan and the University of Nairobi successfully housed a unit working at secondary school level for many years (IEC Learning Kit, 1997, Topic 3, p. 10).

3.5 3. Resources available

The level and nature of the human, physical and financial resources likely to be available also affect the choice of model. Small countries with a limited educational infrastructure which already have difficulty in staffing a single conventional institution are likely to have difficulty in finding the staff for a separate open institution.

Where populations are low, it is difficult to get the economies of scale which make distance education attractive. Small states are likely to be constrained in the way they suggest a role for distance education in providing educational resources that would not otherwise be available. Countries in the Caribbean and the South Pacific have been able to resolve that dilemma by calling on the resources of the two regional universities both, of which have launched programmes for distance education. The price of this may be that a unit teaching at a distance in one of these countries lacks the autonomy that may be enjoyed by institutions in larger countries (IEC Learning Kit, 1997, Topic 3, p. 10).

3.5 4. Degree of autonomy and control

If models were classified according to the degree of autonomy they allow the distance education programmes, then free-standing institutions lie at one end of the scale and some of the co-operative schemes at the other. Political realities are important to consider. There may be a political commitment to establishing

free-standing institutions, which could not be met by any other alternative. Such an establishment may be strongly opposed by other educational or political interests and thereby rendered impracticable.

Ease of access to services from other institutions may determine how far it is desirable or realistic to seek a degree of autonomy or co-operation. In this regard, the Open Learning Institute of British Columbia (now the Open Learning Agency) decided from the outset to seek its subject-matter expertise primarily from the many tertiary level institutions that were already operating in the lower mainland of the province rather than to hire permanent academic staff. This reliance on educators in other institutions could be seen as a form of dependence. On the other hand, it could also be seen as a form of collaboration with other institutions that helped establish the Open Learning Agency's legitimacy as a provider of university-level programmes (IEC Learning Kit, 1997, Topic 3, p. 10).

An institution may wish to control some aspects or functions of the distance education task and not others, for example, if the same institution plans to develop teaching material and provide tutorial support for it, then it is likely to choose one of the dual models.

If, on the other hand it plans to concentrate on the production of material and leave tutoring to a more local institution there will be advantages in a co-operative structure. The Open Learning Institute in Hong Kong has developed co-operative arrangements with other institutions of tertiary education in Hong Kong to provide tutorial support for its students and works with universities outside Hong Kong from which it buys teaching materials. It also develops some teaching material in-house (IEC Learning Kit, 1997, Topic 3, p. 10).

Who has control over and responsibility for teaching is a major issue in dual mode institutions, for example:

- Where distance education units are only administrative in nature, control over what is taught at a distance, who teaches it, and, to a large extent, how it is taught, remains in the hands of the academic units;
- It is more often argued that the development and production of good learning material and the provision of tutorial services requires specialist skills which are somewhat different from those needed for conventional teaching. This leads to the variant in which distance education units have staff with these skills to work with the educators led by managers who have among their tasks, negotiating with academic units and persuading them to offer some of their courses at a distance (IEC Learning Kit, 1997, Topic 3, p. 11).

Single-purpose or single-subject departments and institutions appear to have evolved into broader institutions or to have closed down, suggesting they are most appropriate for doing a specific job over a limited period of time. While many educators have expressed scepticism about co-operative structures, their potential for harnessing resources makes them of long-term significance nationally and internationally.

Establishing a distance education institution will be determined by the activities and functions to be undertaken by the institutions. The choice to be made will then be determined by factors like the scale of operations of the institution, the nature of the educational needs to be met, the availability of resources and the degree of autonomy sought.

3.6 CONCLUSION

In this chapter the difference between the concepts organisation and organising has been made. No single definition of organisation has been made because it would be inadequate to provide a comprehensive insight of the nature and scope of organisation. Each aspect of organisation must be qualified and quantified to obtain a meaningful picture of the field of study. However, for the purpose of this dissertation a classification of organisational structures has been made. Furthermore, a classification and explanation of distance education models has also been made. Given the complexities of political context, needs and resources, there is no consensus on the best buy among the models described. However, within the unity of distance education, a major difference can be claimed between autonomous distance education institutions and distance education departments of conventional institutions. Within these two groupings further subdivisions were indicated to arrive at groupings of institutions about which general statements can be made. Among these is the fact that open institutions have a record of success that compels attention, while bimodal institutions appear to be most successful where:

- they have established a well-supported distance teaching unit; and
- they have their own educational staff who brings pedagogical expertise to developing distance education.

The writer predicts that in future many conventional teaching institutions will incorporate distance education techniques into their course offerings and become mixed-mode or bimodal institutions. This prediction suggests that there will be a progressive blurring of the distinction between distance and conventional education. The writer is convinced that distance education has a vital role to play

in the expansion of effective educational provision to large sections of many societies, which have been deprived of meaningful education in the past.

Single-purpose or single-subject departments and institutions appear to have evolved into broader institutions or to have closed down, suggesting they are most appropriate for doing a specific job over a limited period of time. While many educators have expressed scepticism about co-operative structures, their potential for harnessing resources makes them of long-term significance nationally and internationally.

Establishing a distance education institution will be determined by the activities and functions to be undertaken by the institution. The choice to be made will then be determined by factors like the scale of operation of the institution, the nature of the educational needs to be met, the availability of resources, and the degree of autonomy sought.

Local circumstances and activities it chooses to undertake will determine the structure of a distance education model. Whatever model is chosen requires a framework, which can be used to conceptualise the distance education enterprise and the key management issues confronting organisations that are engaged in distance education. Chapter four will focus on the sub-systems, which will influence the model chosen and address the kinds of management issues that confront managers of distance education institutions. These management issues are real and require important policy decisions.

CHAPTER 4

A NORMATIVE MODEL FOR DISTANCE EDUCATION

4.1. INTRODUCTION

The principal function of a distance education institution and a conventional education institution is the same, namely teaching. However, the methods of teaching are different, so are the structures of the institutions and their management. The management system of a distance education institution, for example, has to cater for the production of media-based teaching materials and for part-time students largely studying on their own, at home.

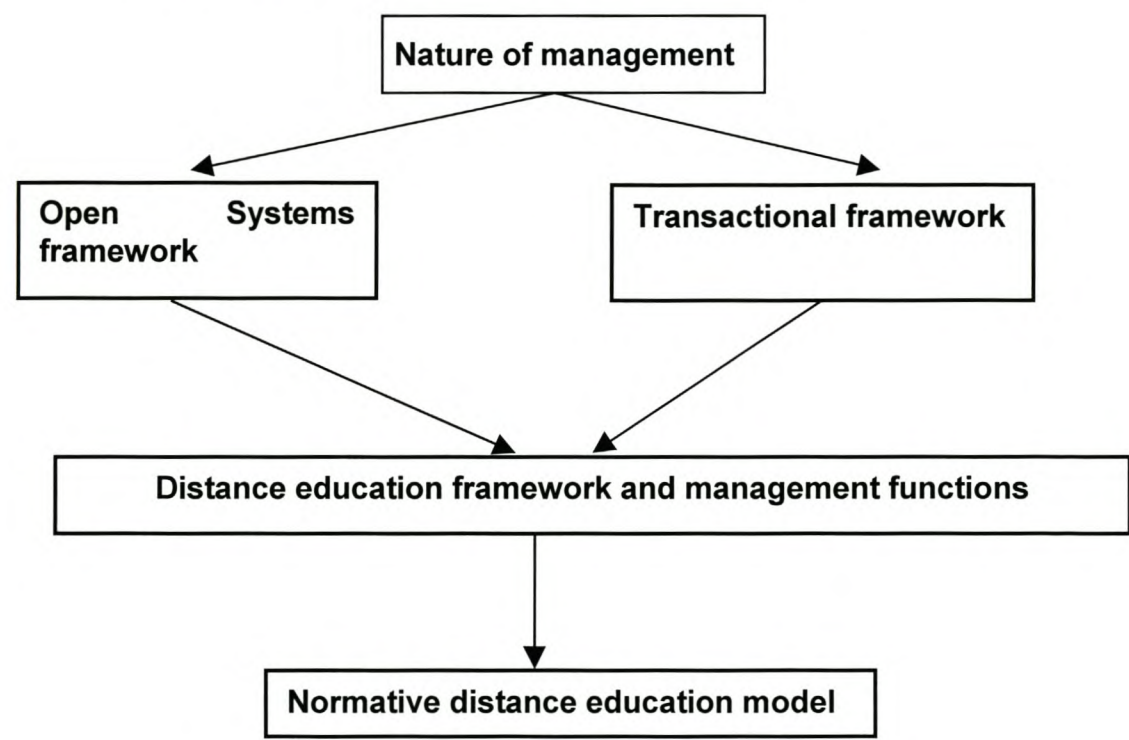
In Chapter 3, the different models of distance education were identified and explained. Each of these models has a unique management system. The purpose of this chapter is to develop a normative model of distance education. The first part of this chapter addresses the nature of management and the sub-systems that influence the management of distance education institutions. In this regard the sub-systems on both the macro and micro-management level are briefly explained. The second part of this chapter refers to an examining of the two conceptual frameworks of distance education management, namely the open systems framework and the transactional framework. These frameworks provide a bridge between the general managerial work and the key management issues as they relate to distance education institutions. The frameworks also provide a useful backdrop explanation of the key management issues. The third part of this

chapter focuses on the key issues confronting management in distance education institutions.

In the fourth part of this chapter the writer identifies a normative model of distance education management as well as the functions to be undertaken in this model. These management functions will be used for the evaluation of the current practice of distance education management at the PoN. Figure 3 gives an outline of the conceptual framework for the developing of a normative distance education model.

Figure 3 indicates the structuring of the chapter and the process of determining a normative model for distance education.

Figure 3: Conceptual framework for the developing of a normative distance education model



4.2. DEFINING THE NATURE OF MANAGEMENT

When the evolution of theoretical approaches to the study of management is considered, two tendencies are clear from the literature. According to the first tendency there is a move away from the closed systems perspective to an open systems perspective. The second tendency is involved in the search for a set of management principles, which can be applied universally to management irrespective of content or circumstances (Fox *et al.* 1997, p. 8).

As far as the first tendency is concerned there is a move away from the closed systems to an open systems perspective regarding management. The closed systems perspective focuses mainly on the internal variables of management and excludes the external variables that may influence management. The open systems perspective focuses on the importance of the external environment in understanding and explaining management.

The second tendency is concerned with the search for the "one best way" of management. The modern view accepts that there is an array of widely different options in management and not a single best way. However, a selection of the correct options must be made in accordance with the demand of the particular management situation.

The most recent perspective on the study of management and organisation is known as the contingency theory. In the 1960s, there was widespread confusion as to which school of management theory was correct, and whether there was indeed, as earlier theorists had argued, universal principals of management, applicable to all situations (Petzall *et al.* 1990, p. 17). Contingency theory was a response to this dilemma. This perspective utilises an open system theoretical foundation and stresses the importance of selecting the correct management

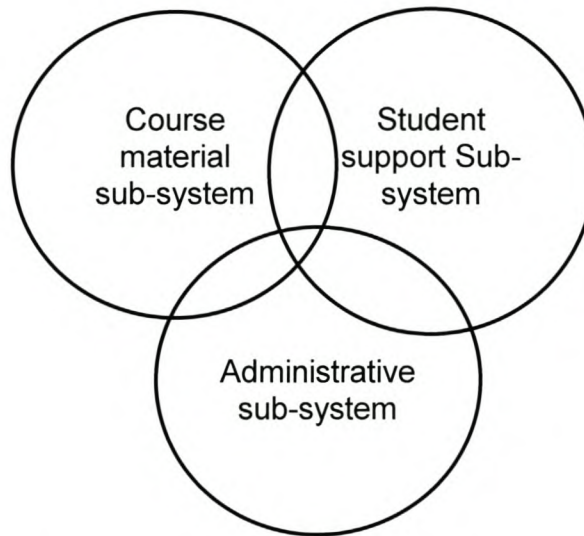
options based upon a proper assessment of the management situation. The writer therefore concludes that there are two major trends in the evolution of management theory, namely a trend towards an open system and a trend towards a situational approach. However, the modern schools of theory like the open systems school and the contingency approach exemplify these trends. In this regard the open systems perspective will be used to describe the management of distance education.

4.3. THE OPEN SYSTEMS FRAMEWORK

The writer believes that an open systems perspective is helpful to understand distance education as a field of study and is essential to its successful practice. A distance education system consists of sub-systems that make up distance education. According to the open systems framework a distance education system has two interrelated sub-systems on the macro-management level and three interrelated sub-systems on the micro-management level. The sub-systems on the macro-management level can be identified as the policy-making sub-system and the institutional management sub-system. On the micro-management level the following interrelated sub-systems can be identified, namely, a course material sub-system, a student support sub-system and an administrative and management sub-system (see figure 4). All these sub-systems are interrelated. Anything that happens in one part of the system has an effect on other parts of the system.

The open systems framework provides a tool that recognise many of the issues that separate distance education from conventional education, but also distinguish good distance education from bad.

Figure 4: Interrelated sub-systems of a distance education systems framework on micro-management level



Northcott (1985) in Deakin University (1993, Topic 1, p.17).

The sub-systems on both the macro and micro-management level form the interconnected parts of a distance education system. The activities undertaken in each of the sub-systems can be described as follows:

4.3.1 Policy-making sub-system

Making policy and ensuring it is followed takes a major effort on the part of an institution's management. To the extent that distance education is different from traditional classroom instruction, or involves the collaboration of different groups, or might even divert resources of money and people's time from conventional methods, it will raise issues that require policies to be made not only within the institution, but also outside at state or national levels (Moore, 1996, p. 184).

Before the concept policy-making is defined, the concept public policy is determined. There are many definitions of the concept public policy in the literature. Definitions of public policy found in the literature range from declarations of intent, a programme of goals, and general rules covering future behaviour to important government decisions, a selected line or course of action, the consequences of action or inaction, and even all government action. (Huges, 1998, p. 130). Public policy has been defined by Anderson (1999, p. 9) as "a purposive course of action followed by an actor or set of actors in dealing with the problem matter or matter of concern. This statement focuses on what is actually done instead of what is only proposed or intended, and it differentiates a policy from a decision, which is essential a choice among competing alternatives". The definition supplied by Dye (2002, p. 1) contains the common denominator of most definitions, namely, "Public policy is whatever governments choose to do or not to do".

According Van der Walddt *et al.* (1999, p. 208) public policy is seen as a series of related decisions, taken after liaison with public managers and political office-bearers, that convert certain needs of the community into objectives to be pursued by public institutions.

According to Fox *et al.* (1997, p. 27 - 28), the following basic elements of public policy can be identified:

- public policy is policy developed by government role players, although non-governmental role players such as interest groups, can also influence the formulation and development of policy;
- public policy is purposive or goal-orientated action rather than a random one;

- policy general consists of a series of decisions taken jointly by politicians and/or officials rather than individual decisions; and
- policy are what governments actually do, for example protect the environment.

From the foregoing it is apparent that no comprehensive definition of public policy exists. For the purpose of this dissertation public policy is a desired course of action and interaction which is to serve as a guideline in the allocation of resources needed to meet the goals and objectives of society, decided upon and made publicly known by the legislative authority. Therefore, policy-making refers to the process of determining what actions governments will take, what effects those actions will have on social conditions, and how those actions can be changed if they produce unsatisfied outcomes. The process of policy-making requires that various activities be undertaken, for example:

- initiation, becoming aware of a public problem;
- agenda setting;
- processing the issue
- making the choice
- publication, making decision known;
- allocation of resources;
- implementation;
- adjudication;
- impact evaluation; and
- feedback.

(Fox *et al.* 1997, p. 33)

4.3.2 Institutional management sub-system

Modern societies have developed three main institutions for meeting their needs, namely, public institutions, private and non-profit institutions. Public institutions, such as government department/ministries, are established by society primarily to:

- create and maintain law and order; and
- provide collective products and services on a non-profit basis, for example, education, health, transport, water and crime prevention (Van der Waldt *et al.* 1999, p. 8).

Public institutions therefore exist to meet society's needs. Public institutions can therefore be seen as an orderly structure or group of persons created to perform specific functions (Cloete, 1995, p. 39). Within each of these public institutions certain management functions need to be undertaken to ensure that set objectives are achieved. In this regard the following basic management functions need to be undertaken:

- planning: Cloete (1995, p. 57) describes planning as " the forecasting of a collection, series or chain of actions to be performed to reach a specific goal." Cloete's definition implies that planning is not only about decision making, but also about choosing alternative ways in which objectives can be reached;
- organising: according to Fox *et al.* (1997, p. 70) ".....public managers organise when they are in the process of establishing a formalised, intentional structure." Establishing a formalised structure entails division of work into categories, centralisation or decentralisation of functions and

authority, co-ordination, establishment of communication channels and the execution of control measures;

- financing: it entails obtaining, allocation, spending and controlling of public finances. At national/state level provision is made for how money is obtain, how specific amounts are allocated to particular institutions for certain objectives and how their spending should be controlled. In an individual government department/ministry, this entails estimating the amounts needed to continue activities, spending voted amounts and controlling how the money is spent (Van der Waladt, 1999, p. 15);
- leading: leading implies the process of influencing others to achieve an objective or objectives (Van der Waladt *et al.* 1997, p. 196). In this regard managers direct, motivate and inspire workers to perform better and to achieve goals;
- staffing: includes filling positions with an institution, which include practices such as recruitment, selection and training (Fox *et al.* 1996, p. 122);
- control: control needs to be carried out by managers to ensure that goals are reached. The process of control requires specific steps to be taken to ensure that goals are achieved effectively and efficiently (Van der Waladt *et al.* 1999, p. 16).

4.3.3 Management and administration sub-system

The management and administration sub-system involves those processes which recruit students, support them in their learning and assess the extent to which they have learnt. The management and administration sub-system is concerned with such matters as:

- publicity;

- applications;
- selection of students;
- enrolment of students;
- record keeping of students;
- assignment traffic control;
- examinations; and
- certification.

(Deakin University, 1995, Topic 1, p. 17)

4.3.4 Courseware development sub-system

The courseware development sub-system implies the preparation of print and non-print material plus the production of the material. In this regard the course material sub-system can be divided into a developmental and production stage and related activities. The developmental stage refers to the setting up of managerial structures to ensure that programmes are academically credible in terms of content, developed on time and within a set budget and systematically evaluated and revised. However, the course material development activities include the following:

- structuring of a programme;
- identifying and selecting the media and teaching strategies;
- developing of course material; and
- evaluating a programme.

The activities to be undertaken as part of the production stage includes the following:

- editing;
- designing of course material;
- typesetting;
- copyright issues;
- printing;
- assistance by media specialist in the preparation of audiovisual material;
- developing experimental kits;
- use of computer technology;
- storage;
- packaging; and
- dispatch of course material.

(Deakin University, 1995, Topic 1, p. 17 - 18)

4.3.5 Student support sub-system

The provision of student support services achieves for distance education systems the essential feedback mechanisms that are characteristic of education. It is mainly through student support services that two-way communication is established between student and institution. The activities linked to the student support sub-system apply only after students have received the course materials and they are engaged in the programme. Problems faced by distance education students stem from the physical distance between the students and the institution, and the resulting feeling of isolation. Anything the institution can do to reduce the feelings of isolation and consequent problems will improve the

students' chances of academic success. In order to support students, the following activities can be undertaken:

- telephone counselling and tutoring;
- vacation or residential schools;
- tutorials/seminars;
- self-help groups;
- individual consultations; and
- contacts, for example, 'hot-line' telephone service.

(Deakin University, 1995, Topic 1, p. 18)

The value of the open systems perspective can be summarised as follows:

".....it clearly identifies the principal activities involved in running a distance education enterprise, as well as the interrelationships that exist between them. It underlines the importance of the quasi-industrial processes that characterise the production and distribution of materials, and lays stress on the specialisation of tasks and division of labour. It defines the difference between an educational publishing institution (which would only require a course materials subsystem) and a distance-education institution (which must also provide an appropriate administration subsystem and student support subsystem). It also helps pinpoint the activities which are independent of student numbers (e.g. course development) and which are therefore susceptible to economies of scale, and is hence a useful starting point for financial modelling. Finally, it underlines the fact that, theoretically and in practice, different groups and institutions can collaborate in providing a distance-education system, each perhaps taking on responsibility for different activities, or clusters of activities, within each subsystem" (Rumble (1986) in Deakin University 1995, Topic 1, p. 18-19).

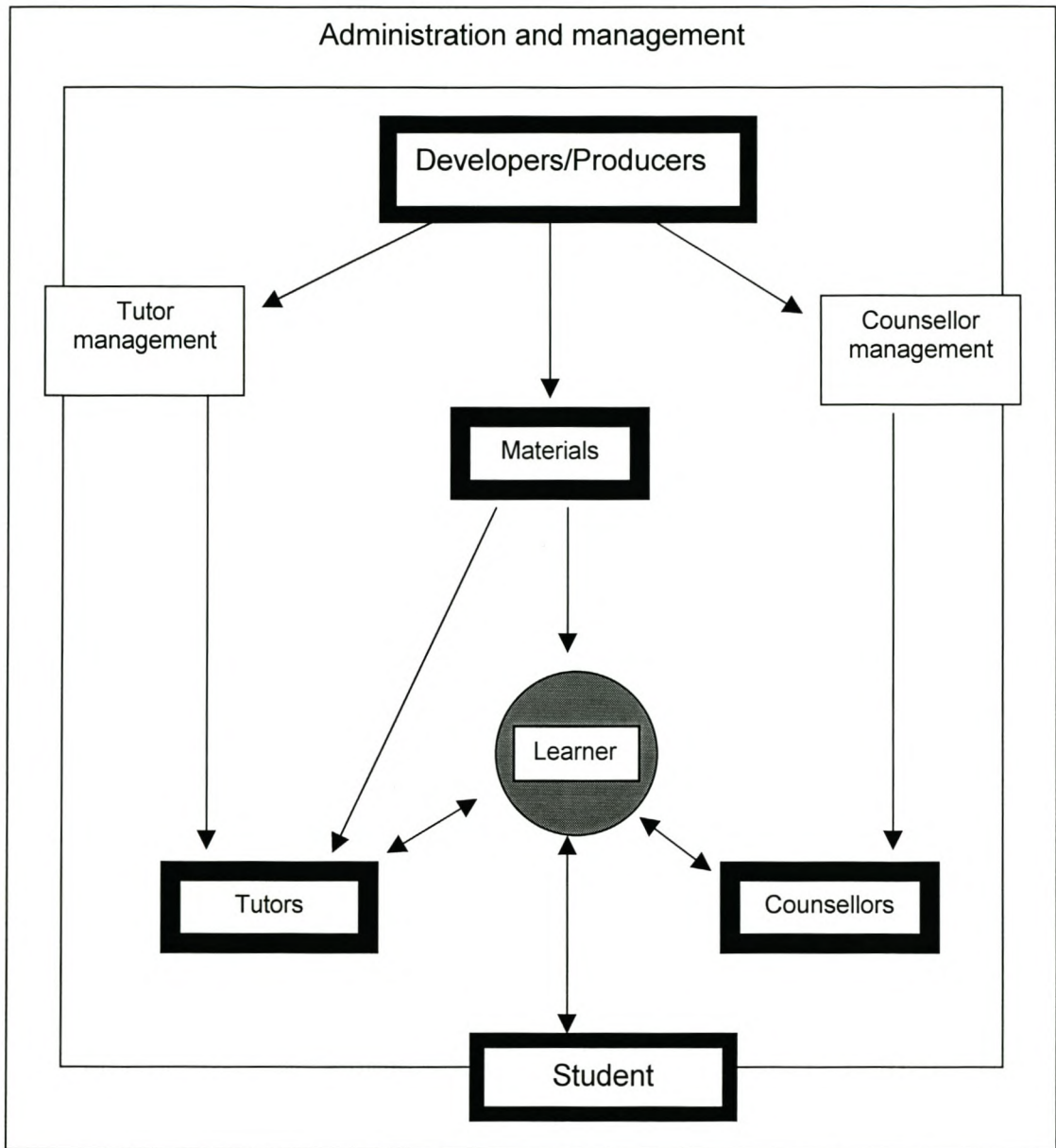
The interdependencies between the sub-systems are an outstanding characteristic of the open systems framework. Institutions need to have a clear strategy and policy on how activities are structured and linked in the parts of a distance education system. For example, the different kinds of courseware produced by the institution will influence the type of delivery and student support offered.

The open systems framework can also provide useful insight into the way a distance education institution can be structured, for example, the way in which common activities can be grouped together into sub-units, and the linkages required to connect the different sub-units together. This point is pertinent to large scale distance education institutions where there is a clear division and specialisation of labour. However, in small scale distance education institutions, the different distance education activities can be grouped together in one separate sub-unit devoted to servicing all needs of the distance education students. Although the systems framework is not equivalent to an institutional plan, it still provides a useful perspective about the issues to be faced by distance education institutions.

4.4. THE TRANSACTIONAL FRAMEWORK

The systems framework for distance education focuses mainly on the varied interdependent activities undertaken by a distance education institution. The transactional framework adopts a different perspective by focussing on the relationship between the key actors or stakeholders in the distance education process. By making use of the UKOU, the transactional framework can be set out as follows:

Figure 5: A transactional framework of distance education



Rumble (1986) in Deakin University, 1995, Topic 1, p. 20)

Any distance education institution represents a nexus of different relationships or transactions between the key parties involved in the learning experience.

According to the students' perspective three types of transaction/relationship need to be negotiated and maintained with different parties in the system, namely:

- transactions with the courseware which will take place at the students' home and/or workplace;
- transactions with fellow students, educators, administrators, and possibly counsellors who will assist students with the courseware and their own life experience. It is expected that these transactions will take place at home, the workplace, a local study centre or during vacation schools at residential institutions; and
- transactions with the institution regarding student support services and administrative matters.

Besides the students' transactions with the courseware, transactions will also take place between students, peers, educators, counsellors and administrators attached to the institution. These transactions are embodied in the activities which are undertaken within the various sub-systems as outlined under the systems framework. Although many of these transactions are invisible to the students, they are, however, very important in sustaining an effective distance education infrastructure to provide a student support service.

According to Rumble (1986) in Deakin University (1995, Topic 1, p. 21) the value of the transactional perspective is that it emphasises the human relations aspect of management as opposed to the systems framework which tends to serve the "rational" aspects of management. Although distance education institutions require a number of manufacturing activities, the transactional framework emphasises the importance of rendering services by people to people through a complex set of transactional arrangements. Due to the complexity of these

transactions and the potential conflict which can arise between key parties in the system it is important to manage the human dimension of distance education institutions effectively.

The systems framework focuses mainly on what is done in a distance education institution whereas the transactional framework focuses mainly on who does what, how and for what purpose. Therefore, the writer concludes that the transactional framework is embedded in the distance education system framework.

Managing distance education institutions differs from that of a conventional education institution. In this regard, the next section will focus on the issues in managing distance education programmes.

4.5. ISSUES IN THE MANAGEMENT AND ADMINISTRATION OF DISTANCE EDUCATION INSTITUTIONS

In writing about the management of distance education, Mugridge in University of London (1994, p. 11-12) says:

“Management and organization are about making things in a particular situation or institution work as effectively as possible in difficult and unpredictable circumstances”.

He goes on to say that hierarchy and structure is put in place to enable management functions and processes to happen. He is therefore saying that structure is there so that the functions can be carried out. In other words, management structure is not an end in itself.

As far as the effective management of distance education is concerned, Erdos (1975) indicated that:

"Experience has shown that there is a recognisable system of distance education with an infrastructure of interacting sub-systems"(UNISA, 1997, p. 18).

Erdos identifies six sub-systems as making up the system of distance education, namely:

- the educational programmes;
- teaching materials;
- student services;
- management;
- finance; and
- evaluation.

Perry and Rumble (1987) in UNISA (1997, p.18) say that the management sub-system "holds together all the others". They include finance in their description of management.

So far not much have been said about administration as such. Administration is an extremely important function, since without it, very little productive activity takes place and management cannot operate. Within any distance education institution the following administrative activities must be undertaken and can therefore be identified as:

- registration of students, for example, forms to be completed, completed forms to be filed in some order, for example, alphabetically or by number;

- sending out learning materials in accordance with the policy of the institution and students records, and monitoring the dispatch;
- recording attendance at tutorials or learning centres, and following up on this information;
- meetings with centre/institution staff to report and to discuss issues, and minutes taking of the proceedings of such meetings;
- lending and control of library books;
- sending out and receiving back from students, assignments to be marked by educators, getting these assignments to the educators, getting them back, recording marks and returning assignments to students;
- registering students for examinations and setting up examination centres, recruiting and appointing invigilators and providing security for examination scripts;
- supporting study groups which meet in a learning centre; and
- facilitating regular communication between educators and the institution (UNISA, 1997, p. 29 - 30).

From the above-mentioned it is obvious that some of the administrative activities operate on national level and some on the local level of the institution, for example, registration, dispatch of courseware and examinations will operate on the national level. Others operate on the local level, for example, records of tutorial attendance, records of assignment received, records of study groups at the regional centres and staff meetings at centres.

The management of distance education programmes differs from programmes delivered in a more conventional face-to-face setting. In this regard the following similarities and differences between distance education institutions and conventional face-to-face institutions can be identified.

Table 9: Similarities and differences between distance education institutions and conventional education institutions

SIMILARITIES	DIFFERENCES
<ul style="list-style-type: none">• Both institutions aim to provide an education which is relevant and of a high quality.• Both institutions aim to offer and achieve certain minimum standards of education and training.• Both institutions have administrative and management systems which enrol students and register them on their chosen programmes.• In the case of formal programmes, both institutions require students to sit for examinations before receiving certification.	<ul style="list-style-type: none">• Distance education programmes often tend to be “open” programmes, concerned with improving access and democratisation of education, as opposed to maintaining education as a privilege of the elite.• Distance education programmes which are also open programmes, tend to lower the academic entrance requirements required by conventional programmes.• Although distance education might be more open than conventional face-to-face institutions, it still has the same exit or graduation requirements. Due to this fact, it places even greater demands on educators to provide student support.• Distance education programmes tend to make use of a mix of technologies and media in the delivery of courses. There will almost always be some print-based material used, but a variety of electronic media will also be included.• Part-time educators, who may be employed by conventional institutions will support distance education programmes.• Due to the greater diversity of functions performed by distance education programmes they tend to need larger administrative bodies.

(IEC Learning Kit, 1997, Topic 4 p. 3)

The above mentioned differences between distance education institutions and conventional face-to-face institutions give rise to a number of issues to be addressed by managers of distance education programmes. These issues can be identified as follows:

- staffing for distance education programmes;
- integration of media in distance education programmes;
- managing project teams;
- systems thinking;
- collaboration with other distance education agencies and institutions;
- centralisation versus decentralisation of courseware and support;
- costing and budgeting;
- monitoring and supervising staff at a distance; and
- evaluating programme performance.

Each one of the above-mentioned issues related to the management of distance education will be discussed in more detail.

4.5.1 Staffing for distance education programmes

A practical task for planners, policy makers and others responsible for setting up and managing a distance education programme is the management of staffing and their training needs. The staff required to set up and implement a distance education programme will depend on two aspects, namely the institutional model chosen, and the educational job to be done.

The offering of a non-formal distance education programme by a dual mode institution will differ tremendously from a formal programme offered by a single

mode, distance teaching institution. However, the personnel needed to run any distance education programme can be categorised as follows:

- educational staff;
- courseware development, design and production staff; and
- administrative staff.

The staffing component of each of these categories is listed in table 10:

Table 10: Staffing distance education programmes

Education Staff	Materials Production Staff	Administrative Staff
<ul style="list-style-type: none">• Subject specialist.• Courseware production specialist.• Tutoring and counselling specialist.• Educators.• Broadcasting producers.• Research workers.	<ul style="list-style-type: none">• Printers.• Copy editors.• Graphic designers.• Broadcast technicians.• Typists/word processing entry clerks.• Desktop publishing specialists	<ul style="list-style-type: none">• Administrators and managers.• Personnel staff.• Financial staff.• Records clerks.• Typists.• Storeroom and dispatch staff.

(IEC Learning Kit, 1997, Topic 4, p. 3)

Due to the nature of distance education, the academic functions, the production and distribution function and the administrative functions are all associated with each other. The students do not distinguish between these different aspects of the programme they follow. Therefore, it is important that the departmental structure of the institution reflect not only the functions, but also the interrelationship between them.

The training of new and existing staff in distance education programmes is essential, because the practice of distance education requires a variety of roles and needs. Staff is often required to learn new work practices and skills.

The training strategy to be used by an institution will largely depend on the choice of institutional model used. Within a dual mode institution, where a course educator and writer is combining his/her role with one of teaching face-to-face programmes, special training programmes need to be designed for use in distance education. Within a single mode institution that makes use of contract educators, and writers, the same kind of sensitivity will be required in training. The timing of these training workshops should be in line with the commitments of the educator(s) and writer(s).

4.5.2 Interaction of media in distance education programmes

The use of technologies in distance education was highlighted in Chapter 2. As a manager of distance education programmes there are two types of decision making involved in selecting and using of media and technologies in distance education. Firstly a decision has to be taken whether a distance education programme will be set up based on certain technologies or not and secondly, how the media and technology can be used best.

The needs of the institution, the target group and the type of programmes to be offered on the distance education mode will determine the first mentioned set of decisions. According to Bates (1991, p. 1) decision making regarding the technology to be used should be based on an analysis of questions that each institution needs to ask, grouped according to the following criteria:

Table 11: Criteria to group media in distance education

A	Accessibility	Is the equipment the programme requires available to the students? Where will they be learning?
C	<i>Costs</i>	Are the costs of production, delivery and maintenance using this technology affordable?
T	<i>Teaching ability</i>	Does the technology convey the level of facts, attitudes and skills the programme requires?
I	<i>Interactivity</i>	Is the technology user-friendly?
O	<i>Institutional issues</i>	How open is the institution to change and the introduction of new media?
N	<i>Novelty</i>	Is it important to the institution to be at 'the leading edge'?
S	<i>Speed</i>	How fast can the programme implement this technology?

(IEC Learning Kit; 1997, Topic 3, p. 13)

Technology will play a very important role in education and training in the twenty-first century. The value of technology in distance education is its ability to reach students who cannot be served by means of conventional educational institutions. Technology can also assist in meeting the emerging educational needs of an information society, and improve the quality of learning.

There are, however, a number of general points that can be made about the usage of technologies in distance education, namely media are flexible. Secondly, all technologies have their strengths and weaknesses resulting in the fact that there is no technological "super medium". Lastly, each medium has its own aesthetic, thus requiring professional production and design of media to be used.

4.5.3 Managing project teams

The keyword in distance education is teamwork. The development and production of a programme in the distance education mode require collaboration between different role-players. In this regard collaboration needs to take place between content experts, instructional designers, editors, graphic designers, educators, counsellors, librarians, registry personnel, courseware developers and dispatch clerks.

Managing project teams place demands on managers involved in line management. The manager must have specified starting and finishing dates for the completion of a task. The manager needs to have a high degree of financial accountability, as projects are more difficult to cost and control than are routine line management functions. Lastly, the manager works with cross-functional teams of temporary members. Some of these members will be reporting to someone other than the manager.

In order to achieve teamwork the manager needs to implement a project management model which integrates all parts of the institution involved in the development, production and delivery of educational programmes. However, any project team has to work within the bureaucracy of the parent institution.

4.5.4 Systems approach

A systems approach needs to be followed in the implementation of a distance education programme. In this regard the systems approach requires thinking about the various tasks as components of a system. The way decisions are made and tasks are carried out in any one of the components will automatically have knock-on effects for all the other components.

Table 12: The components and tasks of a distance education programme

COMPONENT	TASKS
Needs analysis	Design research method; Carry out research; Analyse results; and Draw conclusions for course.
Specifications	Write course specifications, including aims and objectives; Technologies and media of presentation; and Technologies and media of delivery.
<i>Costings</i>	Allocate resources required for course; Produce a budget; and Develop costs.
Staff	Specify staff skills required; Identify current staff available; Recruit additional staff as required; and Brief and train staff as required.
<i>Materials</i>	Search for existing materials; Write or adapt materials; Seek additional production staff as required; Draw up appropriate contacts; Edit materials; Pilot materials; and Produce materials.
<i>Assessment</i>	Identify types of assessment required; Specify assessment methods; Write assessment plan; and Write assessment items.
<i>Support</i>	Specify support systems; Write tutorial guides; Create record systems; Brief educators; and Agree systems with collaborating agencies.

<i>Marketing</i>	Identify market segments; Produce sales and publicity materials; Market the programmes; Advise applicants; Register students; and Induct students.
<i>Monitoring</i>	Write monitoring plan; Agree plan with staff and collaborating agencies; and Implement plan.
<i>Evaluation</i>	Write evaluation plan; Agree plan with stakeholders; Implement evaluation; and Make revisions based on evaluation.

(IEC Learning Kit, 1997, Topic 3, p. 10 – 11)

From the above-mentioned it is clear that the systems approach is not a linear process, because the programme staff will be involved in several of these tasks at the same time, and the interdependency of tasks need to be taken into consideration.

4.5.5 Collaboration

Worldwide collaboration in distance education is becoming the order of the day. Collaboration in the distance education context is taken to mean individuals or institutions working together for mutual benefit. In this regard collaboration can take place within and between nations, between different distance education institutions, and between distance education institutions and conventional teaching institutions.

According to Paul (1990, p. 144 -145) the main reasons for collaboration can be as follows:

- public funding for education at all levels is decreasing, and governments are requiring institutions to work with each other and in many cases with industry in order to qualify for funding; and
- institutions and agencies are responding to decreasing levels of funding by seeking collaborative arrangements that can make scarce resources go further.

Worldwide a number of international institutions have been created to foster course sharing and other kinds of collaboration among their members. In this regard the following institutions can be identified:

- the Open Learning Agency in British Columbia, Canada, collaborates in course sharing arrangements with a number of institutions, including Laurentian University and Athabasca University in Canada and the Open Learning Institute in Hong Kong;
- some postgraduate degrees in distance education have been the results of collaboration, for example, between Deakin University and the University of South Australia, and between the University of London Institute of Education, the IEC, Deakin University and the Open Learning Agency;
- the Contract North network in northern Ontario, Canada, makes delivery facilities available for a number of institutions to offer secondary and tertiary-level programmes to widely scattered populations;
- a number of international institutions have been created to foster course-sharing and other kinds of collaboration among their members, including COL, "Consortium d'institutions francophones de formation a distance"

and the "Consortio-red de educacion a distancia" (IEC Learning Kit, 1997, Topic 3, p. 12).

The management of a distance education programme cannot be successful without taking note of this increasing collaboration between educational institutions, agencies and programmes.

4.5.6 Centralisation versus decentralisation of distance education activities

A common practice amongst distance education providers is to deliver courseware and support to students on a decentralised basis. In this regard distance educational institutions provide learning and support through a series of regional learning centres. According to Paul (1990, p. 100 - 101), the advantages of regional networks are as follows:

Table 13: Advantages of regional networks

- | |
|---|
| <ul style="list-style-type: none">• Provide localised and personalised services to students.• Strengthen the local identity of the educational programme or institution.• Reduce turnaround time of feedback to students on assignments.• Provide enhanced support to students via laboratories, libraries, computer facilities, audio and video conferencing.• Provide sites for regular meetings and tutorial sessions, and• Provide the programmes with direct feedback on performance. |
|---|

4.5.7 Costing and budgeting

Budgeting and costing are crucial in maintaining the financial health of a distance education institution. Operating any institution without a fiscal framework would be virtually impossible. "Value for money" is the key principle to be considered in the costing and budgeting of a distance education programme.

The starting point in determining the costs and budget for any programme to be offered on the distance education mode is to consider the following aspects:

- the purpose of the programme;
- the anticipated number of students to be enrolled; and
- the numbers of programmes to be developed for distance education.

In determining costs for distance education programmes, a distinction can be made between fixed costs and variable costs. The distinction between fixed and variable costs is an essential part of the development of costs for decision-making and control (IEC Learning Kit, 1997, Topic 4, p. 16).

Fixed costs can be divided into committed costs and managed costs. Committed costs include salaries to staff members, rental and rates paid on buildings, insurance, furniture, equipment for courseware production, printing facilities, broadcasting and studio equipment, and vehicles.

Managed costs however are annual or medium-term costs which can be reduced without immediate major disruptions to the objectives, and profits of the institution. Examples can include advertising and marketing, staff training, minor works and maintenance of buildings, and support for research.

Variable costs are those that tend to vary directly with fluctuations in the volume of output. The variable costs will include those which vary with the number of students and the number of programmes. Variable costs include salaries for consultants and outside writers, broadcasting production and transmission costs, and preparation of teaching materials, including editing and graphic design.

The budgeting process for distance education institutions consists of a series of steps by which estimates of revenue and expenses and related statistical data are used to compile a plan for expenditure for the next financial period. The budget for distance education activities will differ from a budget for conventional activities because of the higher proportion of fixed expenses for programme development and revision. This distinction implies that a distance education institution needs to prepare a production budget which reflects the costs of production, and develop a budget reflecting the volume and cost of services delivered.

4.5.8 Monitoring and supporting staff involved in distance education

The management of distance education programmes will always be involved in the monitoring and supporting of staff involved in distance education. These staff will include educators, writers, editors, moderators and regional centre staff.

Staff involved in distance education need support and monitoring, especially since they tend to be:

- part-time employees in distance education;
- are on short-term or annual contracts;
- have no regular face-to-face contact with peers, colleagues and supervisors in distance education;

- no clear definition of their role and responsibilities; and
- policy decisions and procedures are made without taking their needs and circumstances into consideration.

Distance education students also need continuing contact with and support from staff as they work through their studies. In this regard we can distinguish between instructional support and non-instructional support. Instructional support refers to providing tuition and academic advice to distance students. Non-instructional support includes admissions and registration, counselling, and administrative support.

Due to the distance factor, it is very important that management practice effective staff relations in order to ensure an efficient service to distance students. By having an effective monitoring and support system in place, distance education institutions can provide a high quality service to both its staff and students.

4.5.9 Evaluating distance education programmes

Evaluating distance education programmes will ensure their relevance and applicability. In this regard three steps of evaluation can be identified, namely measuring, comparing and correcting. Each one of these three steps presents special problems in a distance education programme (IEC Learning Kit, 1997, Topic 4, p. 18).

By making use of the team approach in the development of distance education courseware, the academic quality of the programmes can be measured. Although the team approach gives distance education programmes more quality and quantity than their conventional counterparts, there is still the notion that distance education is substandard. Determining indicators such as student progress or

drop-out rates is difficult to do on a continuous basis, especially in programmes which follow an open learning policy where students enrol throughout the year.

Distance education programmes can also be compared with conventional programmes in terms of economic and student performance. In the area of economic performance, the standards borrowed from conventional education should be used with caution, for example, capital operating cost ratios tend to be higher for conventional than for distance education programmes. The only difference might be in cases where a distance education programme has to make a major investment in terms of technological infrastructure. As far as student performance is concerned, comparing distance education with conventional education may be difficult, because of differences in entry qualification and circumstances of study.

Corrective action can also be used if the standards of conventional programmes are not appropriate to distance education programmes. However, the complex and integrated nature of a distance education programme may make implementation of new standards somewhat problematic. The flexible nature of distance education, which can respond effectively to students' needs and circumstances, should not be abused in this corrective action.

4.6. NORMATIVE MANAGEMENT MODEL FOR DISTANCE EDUCATION

After examining the internal workings of a distance education unit or institution, the writer proposes a normative distance education management model. This model integrates all aspects, related to the management of distance education. The writer identifies functions to be undertaken for each of the three sub-systems. This model is categorised into five sub-systems, namely:

- the policy-making subsystem;
- the institutional management sub-system;
- the management and administration sub-system;
- the courseware development sub-system; and
- the student support sub-system.

Each of the sub-systems will be briefly examined to establish what exactly it covers, and how it relates to the other sub-systems. A schematic representation will also be made to illustrate the relationship between the different sub-systems.

4.6.1. Policy-making sub-system

As far as the macro-management level of policy-making is concerned, it refers to the process of putting the activities to be performed into words and obtaining approval to implement a policy. The policy-making process usually start with the collection of all relevant information about the subject matter of the envisaged policy. This process is usually done by obtaining information and opinions from public, private, non-governmental institutions, interest and pressure groups within society. The process of policy-making can only be successful if certain criteria are taken into consideration. In this regard the writer identifies the following normative criteria related to the policy-making sub-system:

- setting policy objectives;
- democratic participation in determining policy;
- accommodating needs and values of the public;
- measurement of potential impacts;
- measurement of costs; and
- infrastructure and organisational support for policy decisions.

The second macro-management sub-system refers to the institutional management sub-system, which will be discussed next.

4.6.2. Institutional management sub-system

The public sector in any given country consists of a number of public institutions that render specific services to the citizens/taxpayers of that country, for example education, law and order, health services, etcetera. In order to provide services to the taxpayers/citizens, public institutions need to be properly managed. Institutional management therefore refers to a person(s) who within the general political, social, economic, technological and culture environments is charged with specific functions. For the purpose of this dissertation the normative functions to be performed are:

- planning
- organising;
- financing;
- leading;
- staffing; and
- control.

4.6.3. Management and administration sub-system

According to the writer this is the key system that holds all the operations of the institution together on micro-management level. The administration provides both supervision and services or logistical support. The overall institutional planning, the budgeting, accounting, purchasing, stores and personnel matters are handled

by this department/unit/center. The head of this department/unit/centre is responsible for coordinating and managing all distance education related matters.

The aim of dividing the work of an institution involved in distance education is to ensure a suitable division of labour, through the delegation of responsibility. The institution should also ensure that the distance education work is properly coordinated, so that departments within the institution do not move in opposing directions, and that they get the support they need to carry out their respective tasks. The writer identifies the following normative criteria related to the management and administration sub-system:

- market and publicise programmes;
- provide information on programmes;
- process student applications;
- process student registrations;
- keep student records;
- answer student queries in relation to administrative matters;
- process payments from students;
- process claims by part-time staff;
- process invoices from suppliers;
- administer assignment process;
- administer examinations process; and
- cost and budget distance education activities.

Effectively managing distance education involves establishing performance criteria and targets for the institution. An efficient management and administration sub-system supports the activities of the institution.

4.6.4 Courseware development sub-system

Courseware development covers an extended process, starting from the conceptualisation of what programmes and subjects to offer and the various stages of development of each programme until it is ready to go out to the students. In this regard courseware development includes curriculum design for each course, laying down the boundaries of the programme, getting it written or recorded in a certain format and having it printed and ready for use. The approach that an institution chooses to adopt depends on its status as an institution, for example, the approach used by a dedicated distance education institution is different from the approach used by a mixed mode institution. In this regard three different approaches to course development can be identified, namely:

- the author/editor model. The editor is the key person who holds or brings together the various components of the courseware development process;
- the team approach. In this approach educators from different disciplines, media people, the editor or editors, and graphic artists make up a team to plan and develop a programme. The team agrees on the content and an outline; and
- the content specialist. This mode is often adopted in mixed mode institutions where one content specialist works alone to produce a programme. The final product that goes to the student is often no more than the class notes delivered to internal students.

The writer favours the team approach because a good programme is the one that follows an inter-disciplinary approach in the development of distance education courseware. The following normative criteria have been identified by the writer as part of the courseware development sub-system:

- generate ideas for programmes;
- market research on programmes;
- coordinate courseware development process;
- devise curriculum and syllabus;
- write courseware;
- edit courseware for content;
- edit courseware for language;
- edit courseware for ODL methodology;
- layout of courseware and DTP;
- print courseware;
- store and distribute courseware;
- devise assessment tools (assignments);
- carry out assessment (mark examination scripts);
- moderate assessment;
- award credit; and
- review and evaluate programmes.

In good distance education, well-designed courseware, rather than the educator, provides an appropriate learning environment for the student. Rather than referring to a set of courseware, the programme forms the structure of learning that is designed into the courseware. An essential component in the successful design of distance education courseware is collaboration. This can be achieved by using a team approach in the developing of courseware. After developing the courseware, enrolling the students, and while they are studying, the institution should provide the student with all the help needed to get through the programme.

The next section will focus on the importance of student support in a distance education programme.

4.6.5 Student support sub-system

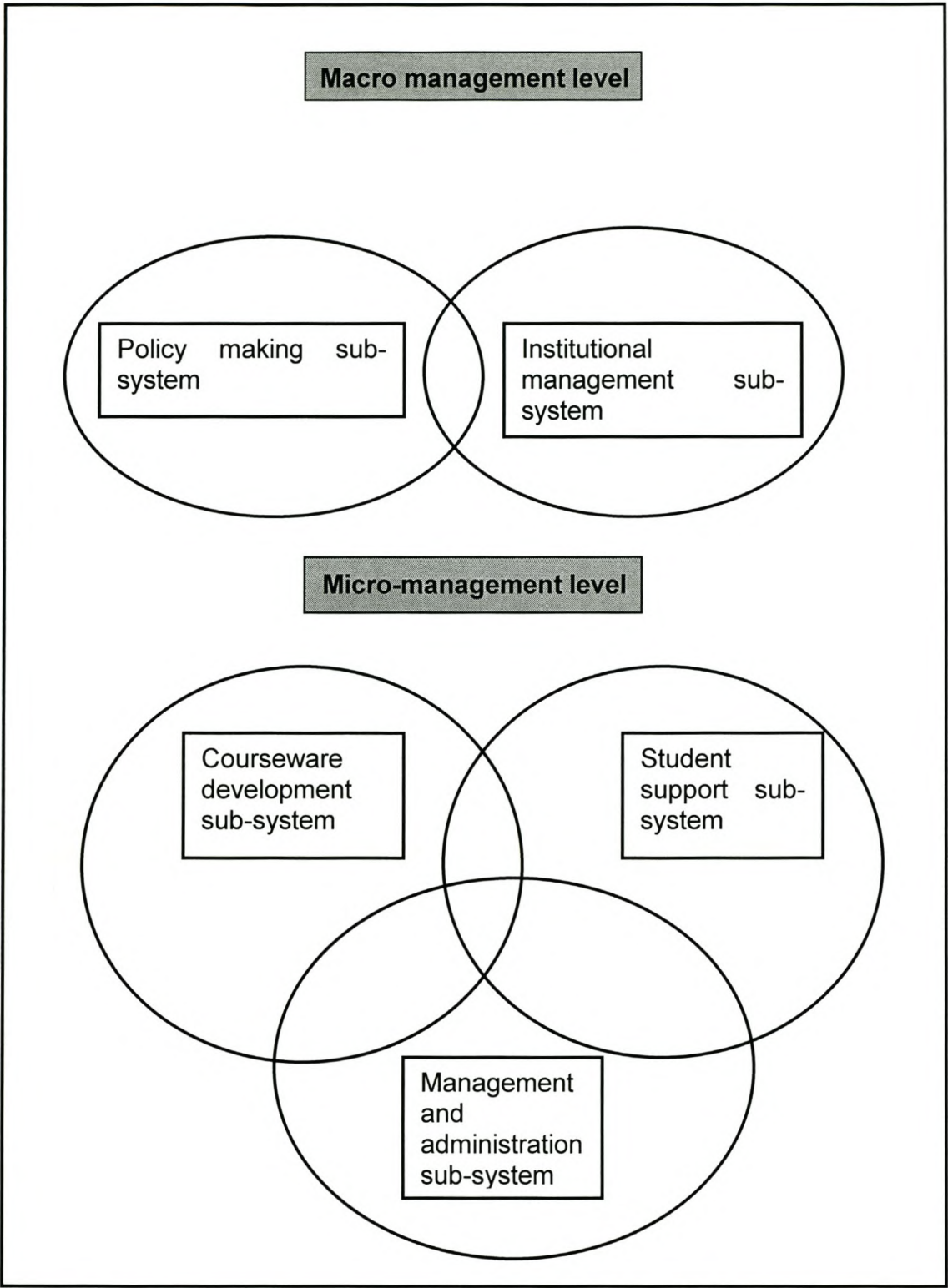
Another important aspect of institutional management is how student support has been organised by the institution. Provision should be made by the distance education institution to advise and help individual students who would otherwise be isolated throughout the learning process, and particularly, to help students to make choices before enrolling for educational programmes. Students require various forms of support, for example, satisfactory access to educators, the opportunity to interact with other students, and access to the necessary facilities. Student support also includes comments on students' assignments, and occasional face-to-face sessions where groups of students receive assistance and help on common problems. Normative criteria applicable to student support services include:

- provide guidance on programme choices;
- provide counselling in relation to studies;
- answer student queries in relation to their studies;
- conduct tutorial sessions;
- organise tutorials and vacation schools;
- provide tutorial support;
- organise and support study groups;
- provide library and study facilities;
- train and support students in the use of new technologies;
- monitor and co-ordinate student support; and
- champion and act as advocate for students.

Students should be supported to a considerable extent by the provision of a range of opportunities for real two-way communication through the use of various forms of technology for tutoring at a distance. Students' needs for physical facilities and study resources and their participation in decision-making should be taken into account.

For the purpose of this dissertation the five interrelated sub-systems can be schematically presented as follows:

Figure 6: A normative distance education management model



4.7. Conclusion

In developing a normative model for distance education it is important to make a distinction between conventional and distance education institutions. Although the principal function of teaching is the same, the methods, structures and management are quite different. Differing scales of operation and different modes of teaching and learning have resulted in distance education institutions having larger administrative bodies and a greater diversity of functions.

In determining the nature of management, the writer concluded that two major trends in the evolution of management theory could be identified. These are trends towards an open system and a situational approach. The writer favours the open system approach because the environment will influence management. The writer also identifies five sub-systems that will determine the management of distance education within an open systems approach. The five sub-systems will be used to describe, evaluate, conclude and recommend certain actions to be taken to rectify the distance education structure at the PoN.

After analysing both the open systems and transactional management framework, the writer concluded that the transactional framework is embedded in the open systems framework, and that the open systems framework will be used as an evaluation tool in evaluating the distance education management model in place at the PoN. The writer also concluded that the management functions undertaken in distance education institutions should be about making things happen as effectively and efficiently as possible under any circumstances. The writer also proposes a normative management model of distance education that will be used as an instrument of evaluating the current model been used by the PoN.

The biggest challenge in the management of distance education institutions is that they remain flexible and innovative in their approach to students' needs, and that they encourage and reward those people and activities that exemplify this approach. Chapter five will focus on the current situation regarding distance education within Namibia. The distance education management structure in place at the PoN will also be described.

CHAPTER 5

DISTANCE EDUCATION IN NAMIBIA

5.1. INTRODUCTION

As indicated in Chapter 2, distance education developed during the 1970s and 1980s as an alternative mode of educational provision. Educational planners in both the industrialised countries and the developing countries took note of this new development. The improvement of programme quality through better communications media and student support systems involving face-to-face contacts was a major step forward compared to traditional correspondence courses based on individual students using only printed materials. In this regard governments worldwide have accepted the fact that distance education can play a very important part in the national education system at secondary and higher education levels. In this regard, the success of the UKOU has provided a new model for distance education especially at higher education level. International institutions such as the IEC in London has provided advice and encouragement to developing countries to establish distance education institutions.

In Chapter 3 it was emphasised that the rationale for the development of distance education was that it could expand access to education to increase the equality of opportunity towards education and meet the social demand which was putting pressure on existing educational systems. Distance education was also seen as a method to reach people such as working adults by orthodox means and that it would expand educational opportunities in a cost-effective manner. Distance

education therefore represents a policy option for national policy makers and national educational planners to consider.

The purpose of this chapter is to use the Namibian situation as a case study for distance education. This chapter describes what happened in Namibia before and after independence in 1990 regarding distance education. Table 14 gives a schematic representation in this regard. The role of the PoN will be described in terms of the functions related to the interrelated sub-systems, as identified in Chapter 4 pages 129 - 135. This description will give an overview of the practical situation at the PoN in terms of distance education management.

Table 14: Distance education providers in pre- and post-independent Namibia

PRE-INDEPENDENCE	POST-INDEPENDENCE
<ul style="list-style-type: none">• Namibian Extension College.• Caprivi Correspondence College.• Department of National Education SWA/Namibia, Distance Education Unit.• Academy for Tertiary Education, Department Distance Teaching.	<ul style="list-style-type: none">• University of Namibia, Centre for External Studies.• Polytechnic of Namibia, Centre for Open and Lifelong Learning.• Namibian College of Open Learning.• National Institute for Educational Development.• Colleges of education.• Namibian Broadcasting Corporation.

5.2. FORMAL EDUCATION IN NAMIBIA BEFORE INDEPENDENCE

Namibia's present educational needs must be understood in the context of the nation's lengthy experience with apartheid. In 1962, the South African government imposed an educational system in Namibia called "Bantu

Education". Schooling for Namibian blacks was characterised by rote learning and a curriculum unrelated to Namibia.

Bantu education was only abolished in 1980 in Namibia. In its place, a system of eleven "tribal" authorities was created. Each of the eleven authorities was responsible for tribal education. During the early 1980s educational opportunities for Africans did, in fact, increase, but this was negated by high drop out rates. By 1988 there were 70 000 school age children not attending school (Johnson 1993, p. 26).

As a result of this strategy of inequity, at independence, 65 percent of the population could not read or write. At independence, the new country lacked approximately 3 000 primary and secondary school classrooms, and between 30 000 and 40 000 young Namibians had no access to schools (Kamatuka (1992) in Johnson, 1993, p. 13).

Prior to independence, higher education for blacks was almost completely neglected. Throughout the 1970s only 300 black students obtained the qualifications for entrance into a university. In 1978, while 2 268 white Namibians were studying at universities in South Africa, only 157 coloureds and 98 blacks were in similar studies. In 1982, only 23 blacks and 7 coloureds as compared to 359 whites earned the qualifications for university entrance (Ellis, 1984, p. 8).

There was no opportunity for Namibians to pursue higher education inside Namibia until the Academy for Tertiary Education which consisted of an university, technikon and COST was established in 1980. By 1990, only 476 students were enrolled for university degrees at the Academy. The vast majority of the Academy's students were registered in non-degree programmes.

Due to the lack of higher education opportunities in Namibia, a number of black students left the country during the 1960s and 1970s. By the mid-1980s about 5 000 Namibians had studied abroad, of which the vast majority were refugees. These students studied abroad largely through the financial assistance of European governments and international institutions (Johnson, 1993, p. 3).

The role of distance education institutions in pre-independent Namibia will be highlighted in the next section.

5.3. A RETROSPECTIVE VIEW OF DISTANCE EDUCATION IN PRE-INDEPENDENT NAMIBIA

5.3 1. Namibian Extension College

Distance education has a very short but evolving history in Namibia. Like in many other countries in the world, there is a belief in Namibia that the distance education mode can offer solutions to the ever-increasing number of citizens that need education. This situation was exacerbated by the return of political exiles following normalisation in the country.

Before formal attempts were made to establish distance education institutions in Namibia, individual students had been involved in privately organised and individual studies. During the late fifties and early sixties, some individuals organised a night school in the Old Location in Windhoek, the capital city of Namibia. At this night school, student(s) and educator(s) met occasionally for evening classes. Later on some people enrolled with commercial correspondence colleges, for example, Sukses and Lyceum Commercial Correspondence College in South Africa for secondary education. Much later, Namibian citizens and residents enrolled at UNISA for postmatric qualifications.

Formal initiatives to establish distance education in Namibia date back to the period before independence in 1990. During 1974 and 1975 a great number of Namibians who were dissatisfied with the unsatisfactory education conditions in Namibia crossed into Angola en route to Zambia and Tanzania in search of better education opportunities. Many of these Namibians who arrived in Zambia were placed in refugee settlements in the west of Zambia. The National Liberation Movement, the South West Africa Peoples Organisation (SWAPO), assumed the role of caretaker. As many of these people were young primary and secondary school leavers, there was a great need to provide them with some form of further education.

In 1976, the SWAPO Department of Education and Culture approached the COL on how to handle the education of its refugee population. SWAPO was referred to the IEC in London for advice in this regard. The former principal of the Namibian Health and Education Centre in Zambia, Mr Vitalis Ankama, contacted the IEC, and the idea of establishing a distance education programme took root. Consequently a core planning group, consisting of SWAPO, the United Nations Institute for Namibia, housed in Zambia, the United Nations High Commissioner for Namibia, the government of Zambia and the COL was set up and met in 1979 with the mandate to plan the establishment of the Namibian Extension Unit (NEU) (Kamupingene, 1993, p. 16).

In 1980 the Central Committee of SWAPO discussed and approved the establishment of the NEU Unit. The unit was then established with its headquarters in Lusaka, Zambia. In 1981 the first director of the NEU Mr. November Mthoko was appointed by the Political Bureau of SWAPO Central Committee.

In 1981 a distance education programme for Namibians became a reality and for a decade the unit rendered an educational service to the Namibian exile population. According to Mthoko the mission of the NEU was clear, namely to spread education to Namibians by distance approaches (Kamupingene, 1993, p. 16).

The specific tasks of the NEC were to:

- produce and distribute distance education materials to the health and education centres, especially in Zambia and Angola;
- train facilitators;
- organise scholarships for Namibian students to study abroad; and
- liaise with other distance education institutions world-wide (Kamupingene, 1993, p. 16).

When Namibia became independent in 1990, the board of management of the NEU dissolved the unit. All assets of the NEU were donated to the new government of Namibia on 28 January 1991.

In the years immediately preceding independence three distance education programmes functioned within the country. The three institutions involved in distance education programmes were:

- the Caprivi Correspondence College;
- the Distance Education Unit in the former "first-tier" Department of National Education; and
- the Academy for Tertiary Education, especially the DDT.

Each one will be described next.

5.3 2. Caprivi Correspondence College

The Caprivi Correspondence College was established in 1981 by a Police Warrant Officer Pretorius, who took up a teaching post at Caprivi Secondary School in 1979 (Kamupingene, 1993, p. 17). Educators at the college were employed on a full-time basis and were paid by the now defunct Caprivi Administration. The duties of the educators at the Caprivi Correspondence College were to:

- write and compile study guides for standards 8 and 10 part-time students;
- prepare assignments for students;
- mark the assignments, and
- conduct some vacation school classes for the students.

The Caprivi Correspondence College was situated at Katima Mulilo. The college made use of the abandoned buildings of what used to be a vocational school. Although Katima Mulilo was the main centre of the college in the Caprivi region, the college had six satellite centres in outlying areas. The college consisted of two groups of students, namely:

- those students who registered to attend evening classes; and
- those students who studied through correspondence.

The former group of students was required to pay R50-00 registration fees and could borrow some textbooks from the college. These textbooks were returned to the college after the November examinations. The latter group of students paid R10-00 per subject and did not attend evening classes. This group of students was also not entitled to borrow books. The subject choice of students was

restricted to only school subjects. Only subjects for which educators were available, were offered.

With the departure of its founder principal, Warrant Officer Pretorius, to South Africa in 1985, the college degenerated as the then Administration of Caprivi transferred the educators to the conventional system. Later, the college functioned merely as an examination centre.

5.3 3. Department of National Education, South West Africa/Namibia, Distance Education Unit

In 1987 a distance teaching subdivision, called the Distance Education Unit (DEU), was established within the non-formal education division of the Department of National Education. The aim of the unit was to provide senior secondary level programmes for underqualified serving primary school educators in the service of that department. The aim was to upgrade their academic qualifications of standards 8 and 10. Unfortunately this opportunity was only available to a few educators, about seven percent of the teaching force in Namibia, who were employed in this department. At the time of the inception of this programme towards the end of 1987, the expectation was to enrol 100 educators for standard 8 and 125 educators for standard 10. The first intake in 1988 totalled 217 students for this programme. The programmes offered were based on South African syllabi (Kamupingene, 1993, p. 17).

This programme existed for about three years and, with independence in 1990, the DEU together with the NEU were absorbed by the newly created MBECYS which had a division of distance education in the Department of Adult and Non-Formal Education. This newly established division of distance education formed

the basis for creating NAMCOL which was established as a parastatal body in 1997, responsible for pre-tertiary distance education.

5.3 4. Academy for Tertiary Education

The first tertiary institution of higher education in Namibia was established in 1980 by the South African government, namely the Academy for Tertiary Education. The Academy for Tertiary Education was founded in 1980 to make tertiary and out-of-school education available to all the people of Namibia. The Academy at that stage consisted of three components, namely an university, a technikon and COST. However, the Academy for Tertiary Education Act, 1980, Act 13 of 1980, did not provide for the Academy to act as an autonomous university conferring its own degrees and professorships. Initially, the Academy was affiliated to UNISA. A formal academic agreement was reached between UNISA and the Academy in terms of which the Academy was recognised not only as an acknowledged tertiary institution under the statute of UNISA, but also by the Joint Statute of Universities in South Africa.

On 20 September 1985, a new act, the Academy Act, 1985, Act 9 of 1985, was promulgated by the National Assembly of the transitional government of SWA/Namibia and implemented at the end of 1985. The purpose of the Act was to introduce a new era for the institution.

The intention of the Academy Act, 1985 was to:

- reconstitute the Academy for Tertiary Education with a greater degree of autonomy and under the name of the Academy to extend its powers to enable it to organise sections as an university, college, technikon, institute or similar body and that it may award degrees, diplomas and certificates;

- provide for the management and control of its affairs; and
- provide for incidental matters.

This event marked an important shift in the objectives of the institution. It moved from an institution training mainly educators with a special and intensive interest in general education to a multi-purpose institution with varied lines of specialisation, many of them career-oriented. Furthermore, the Academy had the power to obtain its own examination and certification powers. This led to the introduction of a vast number of programmes, and the introduction of programmes on a distance teaching basis, and the signing of accreditation agreements with second tier governments in SWA/Namibia (Academy Jubilee, 1980-1990, p. 18).

The DDT at the Academy was established in 1986 to offer the following educational qualifications on the distance teaching mode:

- Higher Primary Education Certificate (3 years);
- Education Certificate Primary (3 years); and
- Education Diploma Primary (2 years).

The DDT was at that stage a purely administrative unit in the office of the registrar. The head of the DDT was made accountable to the registrar of the Academy who was the head of the entire administration of the Academy. The department managed the writing, printing, and distribution of the programmes, commissioned, without guidance, from academic staff members. The programmes offered were owned by the university, technikon and COST, using syllabi that were decided by the three components and was subject to the rules and regulations that were decided by the Academy for the award of certificates,

diplomas and degrees. Three years later, in 1989, the following distance teaching courses were added to the then current list of courses offered:

- National Diploma in Public Administration (3 years);
- National Diploma in Police Science (3 years);
- Certificate in Community Development (1 year); and
- Certificate in Library Science (1 year).

At the same time nine regional centres were set up to provide an administrative support service to the distance education students in the country. Regional centres were established at Keetmanshoop, Gobabis, Swakopmund, Khorixas, Tsumeb, Otjiwarongo, Oshakati, Rundu and Katima Mulilo. With the establishment of the University of Namibia in 1992, the Academy as an institution ceased to operate.

After independence in 1990 the role of distance education institutions changed drastically. The main reason for this shift was to illustrate the new government's commitment to provide education for all its citizens. The next section will elaborate on the role of these institutions.

5.4. THE PRESENT PROVISION OF DISTANCE EDUCATION IN NAMIBIA

Namibia is a large country with a very unevenly spread population. Its previous education history has led to an equally uneven distribution of tertiary qualifications among its different communities. In addition, the institutional infrastructure at tertiary level that could permit a part-time alternative simply does not exist throughout the country, especially in the Northern part of Namibia where the previously most disadvantaged majority live and work. These factors, size

and unequal access to the education system make it essential to use distance and open learning facilities to reach out to all corners of the country and to redress the inherited inequities.

Before independence in 1990, it was recognised that distance education has the potential to address the educational and training needs of Namibia in a cost-effective manner. Distance education strategies become even more important in the context of Namibia's inability to afford, either financially or in terms of the consequences for daily activities, to release its professional, managerial, and para-professional staff for extended periods of in-service, full-time training or upgrading. In this regard the White Paper on Higher Education clearly states:

".....distance education and open learning can in the very near future offer the majority of Namibian adults the most economic, effective, and available opportunities to seek tertiary level qualifications. Limited financial resources, family and professional responsibilities and geography make other alternatives unaffordable or inaccessible" (MHEVTST, 1998, p. 68).

Since 1990, there has been considerable progress in transforming Namibia's education system at all levels. Reforms at secondary level have led to a more balanced curriculum and a dramatic increase in the number of students. However, the tertiary sector has been characterised as:

"Generally supply driven rather than need driven or demand driven, other programmes in our higher education institutions also seem out of touch with current realities. There is therefore an urgent need to synchronise tertiary education programmes with the rest of the education system and with the development needs of our country" (MHEVTST, 1998, p. 5).

While the provision of programmes through distance education has expanded considerably in an independent Namibia, publicly-funded institutions also display some of the short-comings identified above. In the Namibian public sector, there are four institutions which currently provide distance education programmes, namely:

- UNAM;
- PoN;
- NAMCOL; and
- NIED.

In addition, the Windhoek and Ongwediwa colleges of education play a supporting role in the delivery of the in-service BETD through distance education. The Namibian Broadcasting Corporation (NBC) also has a statutory obligation to provide educational broadcasting services.

For a developing country, Namibia is well endowed with publicly-funded distance education institutions. In addition, because of its historical ties and relative proximity to the South African market, a number of public and private sector distance education institutions in that country also enrol Namibian students. Such South African public academic institutions include Vista University, UNISA, TSA and Rand Afrikaans University. Amongst the South African private sector institutions are Sukces Correspondence College, Lyceum Correspondence College, INTEC College, Rapid Results College and Damelin Correspondence College.

Each of the publicly-funded institutions in Namibia will be described next. For the purposes of this dissertation, the structure and functions of UNAM and the PoN

will be highlighted. The PoN will also be described in terms of the activities related to the three interrelated distance education sub-systems.

5.4.1. Centre for External Studies at the University of Namibia

After Namibia became independent in 1990, the Namibian government appointed a Presidential Commission on Higher Education, composed of local and international scholars to address issues of concern regarding higher education in Namibia. The terms of reference of the Commission were to:

- establish the needs, demands and scope of higher education;
- determine the institution and structure of the higher education system, including the nature and location of higher education institutions;
- analyse the funding of higher education, both recurrent and capital;
- determine the qualifications for admission to and the duration of the various higher education programmes;
- define the control of higher education and its relationship with the government;
- determine the range and level of programmes in the higher education system;
- determine the extent of the higher education system in the medium and long term, in relation to national human resource needs;
- consider the financial support of students at Namibian and foreign higher educational institutions; and
- analyse the promotion, conduct and financing of the nation's research.

(Report of the Presidential Commission on Higher Education, 1991, p. 1)

The Presidential Commission submitted its report in September 1991 and recommended that the Academy should be dissolved and that a new national UNAM, and a PoN should be established. The Commission also recommended that higher education in the country should be coherent and responsive to national development goals, needs, and employment requirements, especially taking into consideration the imbalances and malpractices of pre-independence regimes. The Presidential Commission on Higher Education also proposed that there should be a clear distinction between pre-tertiary and tertiary distance education.

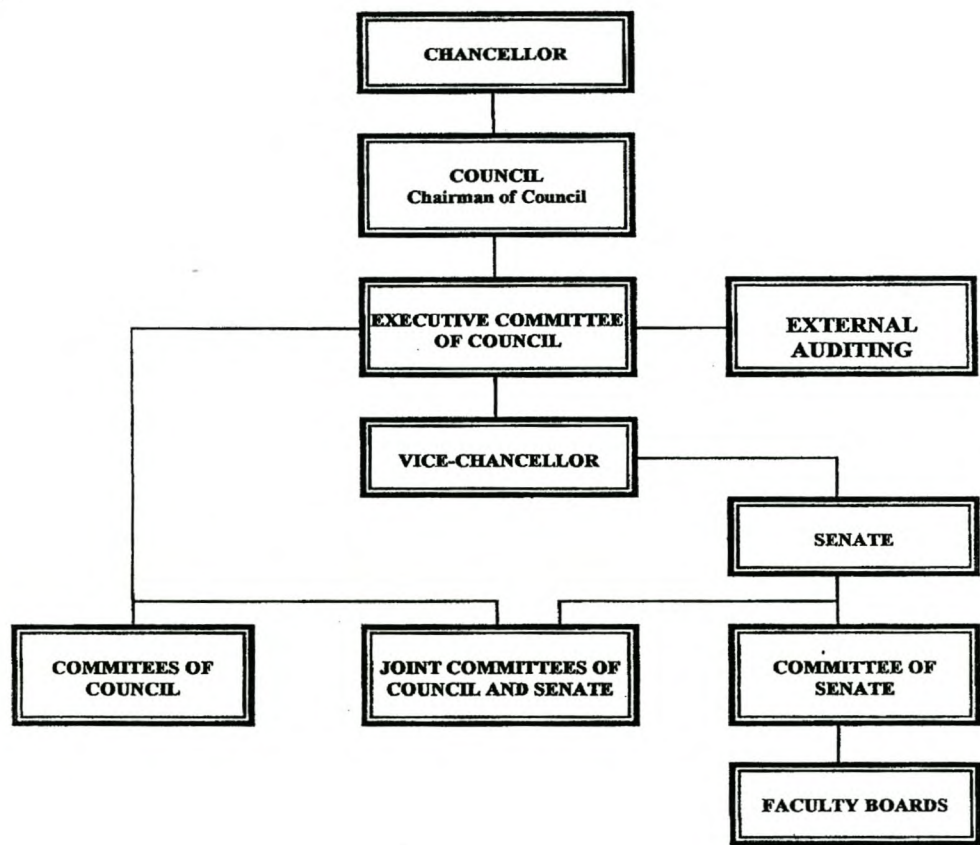
UNAM was established in terms of the University of Namibia Act, 1992, Act 18 of 1992. The university act affirmed the autonomy of UNAM and its commitment to the spirit and letter of free academic inquiry. The act stresses the intention of UNAM of being responsive to the social, economic, cultural, scientific and academic needs of Namibia. Indeed, UNAM's motto is "Education to Serve Development".

After the establishment of UNAM in 1992, UNAM took responsibility for the management and administration of the technikon and COST programmes until the PoN was established. The university administration also decided to reform and restructure distance education at the tertiary level in accordance with the proposals of the Presidential Commission on Higher Education in Namibia.

Distance education at UNAM has been in existence since the establishment of the Academy for Tertiary education sixteen years ago. Initially the courses offered were either UNISA courses or courses very closely modelled on UNISA's correspondence courses.

As the rebirth of the new, post-independence UNAM came closer, the management of UNAM recognised the importance of distance education and decided to give distance education the prominence it deserves within the university structures. To this end the CES was established with faculty board status. See figure 7 for an organisational structure of UNAM.

Figure 7: Organisational structure of the University of Namibia



The mission of the CES is to make education accessible to all members of the community through the provision of open learning programmes. This mission is a

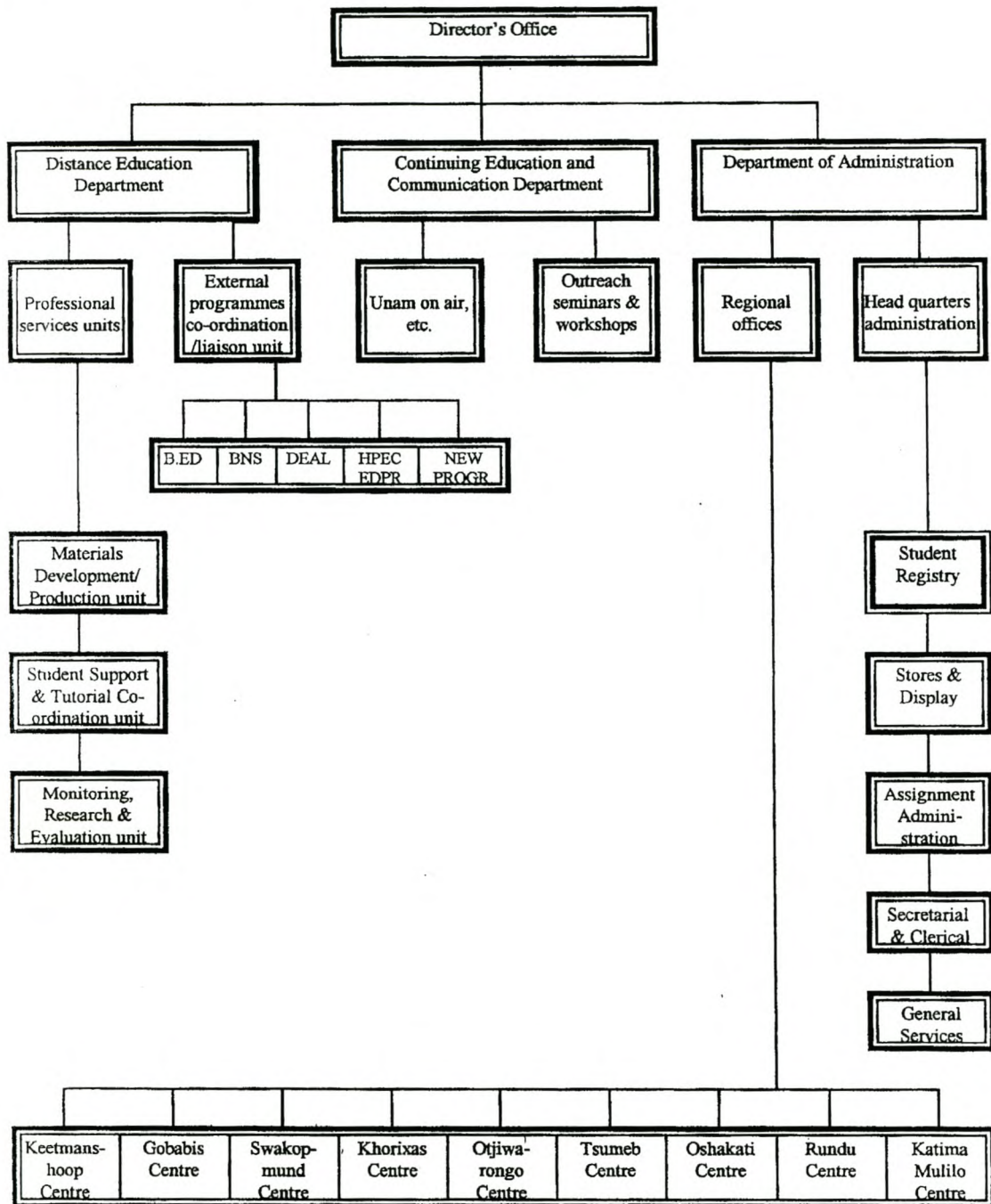
sub-statement of the mission statement of UNAM, and is more precisely elaborated as to:

- develop and provide extension and distance outreach programmes;
- identify and determine where needs exist for the provision of distance education programmes;
- provide professional distance education advice to all faculties of UNAM and other educational institutions and providers;
- develop and administer training programmes for all involved in the development and production of distance education courseware;
- design and administer programme delivery systems including materials and students support services;
- recruit, train, and supervise tutorial staff required for programmes delivery;
- develop and administer appropriate assessment systems for programmes in collaboration with other UNAM faculties;
- in collaboration with other faculties, determine programme content, syllabi, assessment and validation procedures before the writing stage; and
- coordinate the writing, editing and production, printing and distribution of courseware required for the delivery of distance education programmes.

(CES/UNAM Yearbook, 2001, p. 3)

The CES is structured in such a way that it consists of two departments, namely, the Department of Distance Education (DDE) and the Department of Continuous Education (DCE). The CES has equal status with a faculty within UNAM and the director of CES is the equivalent of a dean. A board of studies is appointed to oversee the affairs of the CES. The administration of the CES is undertaken by one administrative set up (see figure 8 for an institutional structure of the CES).

Figure 8: Organisational structure of the Centre for External Studies at the University of Namibia



The DDE was until 1996 responsible for the presentation of all UNAM and PoN tertiary courses to distance students. During 1995, the DDE served 1800 adult distance education students. Students were enrolled for tertiary programmes in education, public administration and police science. The DDE operates in a dual mode system whereby it functions as part of an existing university and depends on its parent bodies for the following:

- courses offered by DDE are owned by UNAM or the PoN;
- curricula and syllabi for courses are approved by UNAM faculties or schools of the PoN;
- examinations and grading of students are done according to the rules and regulations of UNAM or the PoN; and
- certificates, diplomas and degrees are awarded by UNAM or the PoN.

The work of the DDE entails administrative and technical duties. In this regard the DDE is responsible for recruiting academic staff from UNAM and PoN and elsewhere to compile courseware and teach distance education students, getting the print unit of UNAM to print courseware and to distribute courseware to and from distance students across the country. However, the full-time academic staff of the DDE is responsible for writing instructional courseware that teach rather than merely impart information and tutor students in such a way that they can understand and apply the information acquired from the written instructional courseware.

A less economically endowed distance education institution like the CES has to rely on part-time staff to do most of the academic work. Part-time educators at the DDE are educators-in-print and provide limited academic guidance and counselling to distance education students.

Employment of part-time staff does not reduce the academic responsibilities of CES. Full-time academic staff of the CES extend their academic responsibilities to part-time contract staff by monitoring their work. They do this by means of checking the marking and tutoring done by part-time staff and offer training to newly appointed part-time staff to orientate them to the new way of teaching at a distance.

At the time of its establishment, CES inherited a programme of distance education offerings from the former Academy. The Academy programmes consisted almost exclusively of certificate and diploma programmes in teacher education, while certificate and diploma programmes in public administration and police science were subsequently assigned to the PoN in 1995. The CES currently offers the following distance education programmes.

- Diploma in African Languages (2 years);
- Bachelor of Nursing Science (Advanced Practice) (3 years);
- Bachelor of Education (4 years); and
- Bachelor of Business Administration (4 years).

(CES/UNAM Yearbook, 2001).

Beginning in 1999, CES also implemented a bridging programme in english and mathematics on a pilot basis in Northern Namibia. The aim of the programme is to assist students who need to upgrade their english language and mathematical skills in order to gain admission to UNAM's full-time programmes. CES also organises short courses, seminars, public lecturers and radio broadcasts as part of its continuing education activities.

UNAM maintains the nine regional centres in the country. The management and control of the centres were assigned to CES. In 1994 UNAM introduced a number of initiatives aimed at addressing the support needs of students with a view to enrich their learning experience. To this end UNAM began to upgrade the nine regional decentralised centres. The aim of the decentralised centres is to create a supportive learning environment by providing students with a wide range of student support services.

In the context of drafting the second five-year plan for UNAM, a number of proposals have been made to expand the centres, role. These include:

- development of partnerships between UNAM and private and public sector employees to create tailor-made training programmes;
- introduction of a nationwide programme of UNAM outreach/lifelong learning;
- management and delivery of distance education programmes as a service agency for other tertiary institutions; and
- creation of a national facility for research, experimentation and training in distance learning, adult education, lifelong learning and communication.

(UNAM Strategic Plan, 2000, p. 36).

5.4.2. Distance Education Centre at the Polytechnic of Namibia (1995 – 1999)

The PoN has its roots in the establishment of the Academy for Tertiary Education. Classes in vocational, teacher and secretarial training started in January 1980. Five years later, in 1985, the technikon component of the

Academy for Tertiary Education offered a total of 17 diploma and certificate programmes in agriculture and nature conservation, personnel management, public administration, cost accounting, secretarial training and communicative and legal training while COST offered a total of 13 certificate programmes in technical, commercial and pre-tertiary teacher education.

Shortly after independence in 1990 it was resolved that the three components be combined into two independent higher education institutions, namely an university and a polytechnic. UNAM was established in 1992. However, the administration and management of both the technikon and COST were placed under the auspices of the new university until the promulgation of the PoN act.

Two years later, in 1994, the PoN was established. In terms of the Polytechnic of Namibia Act, 1994, Act 33 of 1994, the technikon and the COST merged to become the PoN. The PoN act defines its responsibilities as to:

- provide post-secondary education;
- provide continuing education at the post-secondary level;
- undertake research;
- ensure the existence of equal opportunities; and
- safeguard effective collegial governance.

The mission of the PoN is to contribute to Namibian development by providing tertiary technological career-oriented education at internationally recognised standards. The instruction programmes of the PoN are aimed at meeting the needs of industry. With emphasis on the transfer of technology, the PoN gives due regard to the professional human resources requirements of the country and those of the region and beyond. The PoN act also provides for the gradual

phasing out of vocational training courses and the granting of degrees by the PoN (see figure 9 for an organisational structure of the PoN).

During 2001, the Polytechnic caters for over 4500 students and there are more than 250 academic staff. The student enrolment profile of PoN demonstrates a very wide diversity of teaching, PoN's commitment to working hand-in-hand with business, industry and the government to provide courses to meet the demands of a changing workforce, has resulted in a large and varied range of programmes. These include full-time, part-time, on-campus and distance education programmes. Indeed, there is a course to suit each and every student.

The academic side of the PON is divided into four schools which, in turn, are divided into a range of departments responsible for various disciplines as outlined below.

School of Business and Management

Department of Accounting and Finance

Department of Business Management

Department of Public Management and Economics

School of Engineering and Information Technology

Department of Mechanical Engineering

Department of Electrical and Electronic Engineering

Department of Civil Engineering

Department of Information Technology

Department of Technical and Vocational Education and Training.

School of Natural Resources and Tourism

Department of Agriculture

Department of Land Management

Department of Nature Conservation

Department of Hospitality and Tourism

School of Communication, Legal and Secretarial Studies

Department of Media Technology

Department of Secretarial Studies

Department of Legal Studies

Each of the schools offers a wide variety of programmes. The higher programmes, for example, national diplomas or higher, are listed below. These are specifically designed for those wishing to upgrade their qualifications. Additionally, there are two certificate and higher certificate programmes in instructor training.

B.Tech Degrees

Agriculture Management

Nature Conservation

Accounting and Finance

Marketing (from 2002)

Mechanical Engineering (from 2002)

Human Resources Management (from 2003)

Public Management (from 2003)

National Diplomas

Accounting and Finance

Marketing

Human Resources Management

Public Management

Information Administration

Mechanical Engineering

Electrical and Electronic Engineering

Civil Engineering

Business Computing

Information System Administration

Software Engineering

Natural Resources Management

Hospitality Management

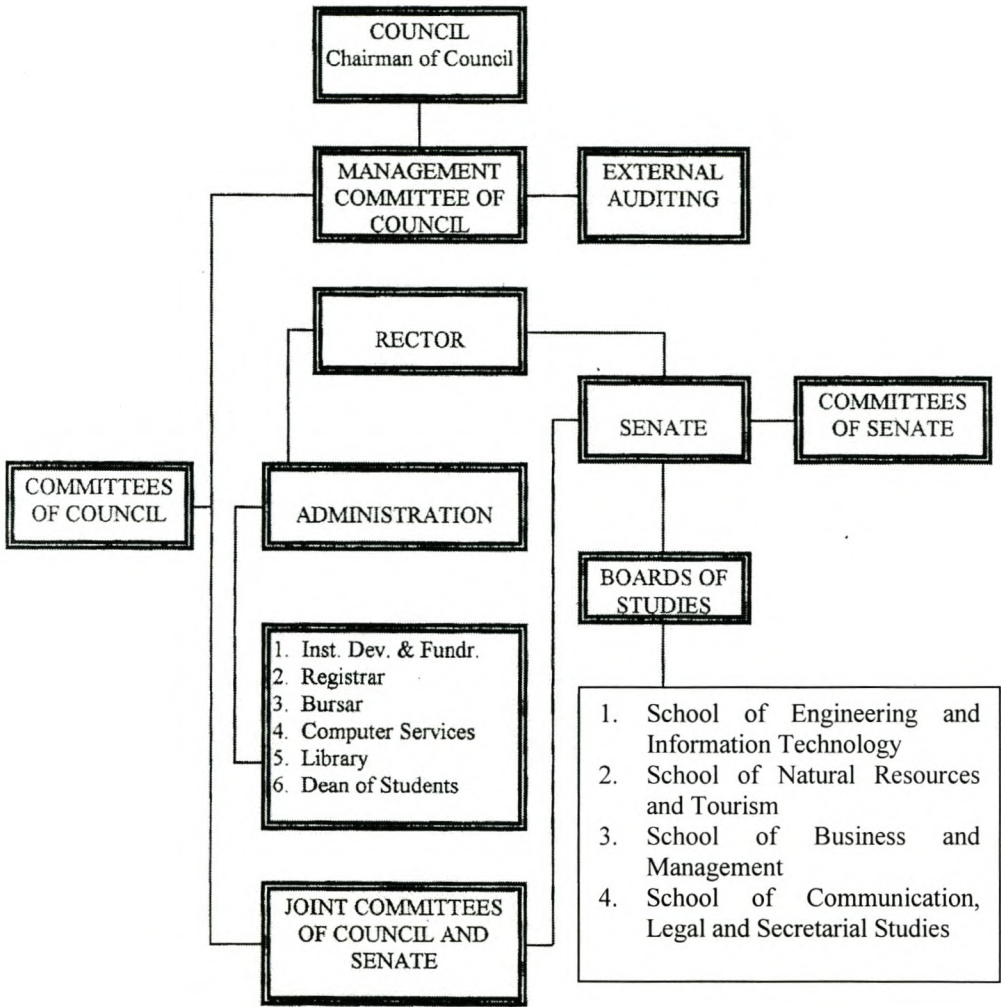
Travel and Tourism

Land Management

Business Administration (from 2002)

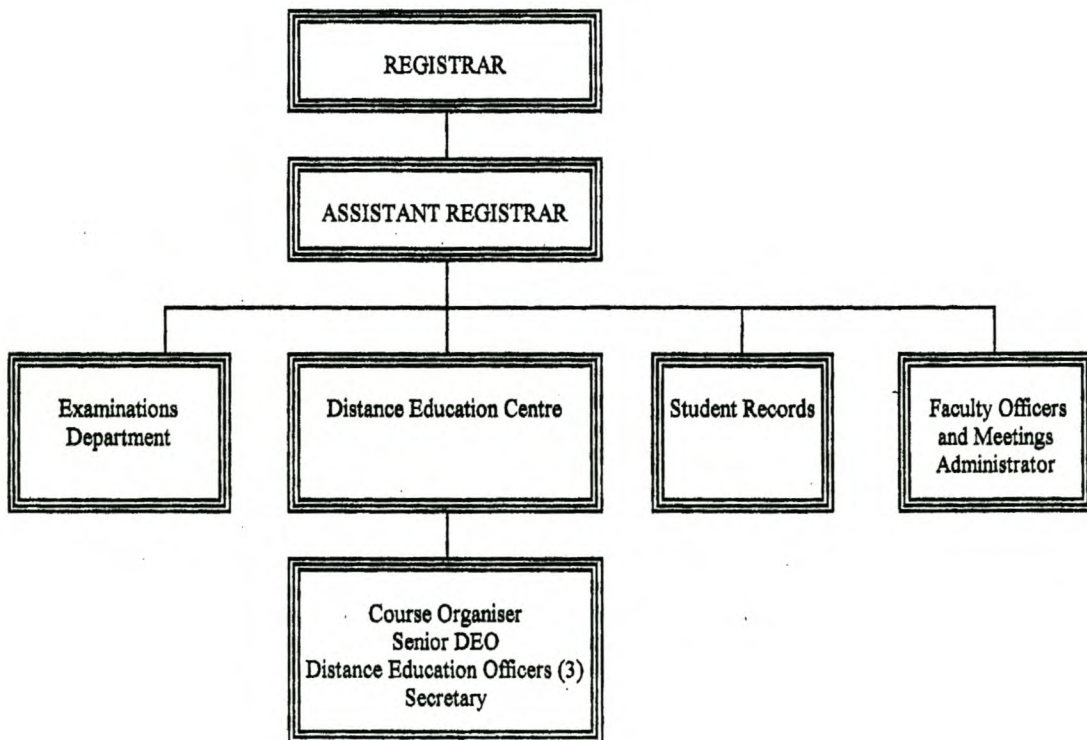
Media Technology (from 2002)

Figure 9: Organisational structure of the Polytechnic of Namibia



In terms of section 4 of the PoN Act, 1994, the PoN is mandated to provide “post-secondary career education and continuing education at a post-secondary school level”, though no specific reference is made to distance education. Nevertheless, a decision was taken to establish a separate Distance Education Centre (DEC) at the PoN which operated from January 1997 until December 1999, in order to facilitate the delivery of programmes on distance education (see figure 10 for an organisational structure of the office of the registrar at the PoN until December 1999).

Figure 10: Organisational structure of the office of the registrar at the Polytechnic of Namibia until December 1999



5.4.3. Centre for Open and Lifelong Learning at the Polytechnic of Namibia since January 2000

At the end of 1999 a five-year strategic development plan was developed for the PoN. At a special meeting of the council of the PoN on 13 September 1999 a new departmental structure was approved for the office of the registrar, and in particular for distance education (see figure 11, page, 156, for an organisational structure of the office of the registrar since January 2000).

In January 2000 the name DEC was changed because it was seen as too narrow or restrictive in its scope and, as such did not effectively enable the institution to achieve one of its aims stated in the PoN act, namely, to provide continuing education at post-secondary school level in order to expand the educational horizons of the adult community. The new name COLL is open-ended, broader and more embracing. The term lifelong learning was adopted by the PoN to indicate the institution's recognition of its involvement in both formal and non-formal educational activities in Namibia.

As far as distance education is concerned the PoN subscribes to a dual mode pattern and can therefore be classified as a mixed or dual-mode institution. The COLL is currently under the office of the registrar, and as such administrative functions are still its major preoccupation. In this regard the COLL consists of six administrative staff members who perform all administrative functions. They are:

- a coordinator;
- three student support officers;
- a faculty officer; and
- a secretary.

According to the new institutional structure the COLL will consist of two departments, namely, the Department of Open Learning and the Department of Lifelong Learning. The Department of Open learning will deal with:

- courseware design and development;
- production of courseware;
- tutoring;
- counselling;
- student support;
- monitoring; and
- research.

The Department of Lifelong Learning will deal with:

- adult education;
- public lecturers and seminars;
- public/community education;
- workshops; and
- conferences.

Although a new institutional structure for distance education was approved by the council of the PoN in the form of the COLL, the new structure has not been implemented. Two reasons can be cited for non-implementation of the new structure, namely financial constraints and lack of understanding, interest and commitment amongst management to fully implement the new institutional structure. Furthermore as from January 2001 a Centre for Teaching and Learning (CTL) was created within the PoN to cater for all continuous education activities. The activities listed under the Department Lifelong Learning within the COLL will in future be dealt with by the CTL (PoN Strategic Plan, 2000, p.18)

During the 2000 academic year a need was expressed by the staff of the COLL to identify the role and functions of the COLL within the PoN. To this end a workshop was held in Windhoek on 14 and 15 November 2000 to determine the vision, mission and development priorities for the COLL for the future. The following vision, mission, and development priorities were approved:

5.4 3.1 Vision statement of the Centre for Open and Lifelong Learning

The COLL strives to extend PoN programmes of post-secondary, career-oriented education and training in applied sciences and technology using open and distance learning methods.

5.4 3.2 Mission statement of the Centre for Open and Lifelong Learning

The Centre is committed to:

- providing affordable access to PoN programmes;
- providing appropriately equipped, study, resource and research facilities in the regions or in a place that is as close as practicable to its students;
- providing administrative and student support services in the regions or in a place that is as close as practical to its students ;
- providing interactive, student-friendly courseware; and
- constantly reviewing and upgrading of courseware, services and facilities with reference to international best practice for distance education in cooperation with the academic schools and departments within the PoN.

5.4 3.3 Development priorities for the Centre for Open and Lifelong Learning

- introduce information and communication technologies (ICTs) at regional centres, including "hands-on" training for both regional staff and students;
- extend the range of programmes available through distance education;
- facilitate the revision of courseware to encourage active learning;
- set up a programme of orientation, training and development in distance education methodologies for full-time and part-time staff at both head office and in the regions;
- develop and sustain effective management structures for distance education at the PoN;
- organise and support self-facilitated study groups;
- coordinate the transfer of existing courseware to develop on-line programmes; and
- encourage the PoN to provide more flexible study options, by reviewing and reducing administrative barriers.

A strategic development programme, as set out in Appendix A, has been compiled to indicate how the development priorities will be implemented. These development priorities were brought in line with the strategic development priorities of the PoN as set out in the five year strategic plan of the PoN as from 1999 until 2003.

The PoN through the COLL currently (2001) offers the following courses on the distance education mode:

- National Certificate in Public Administration (1 year);

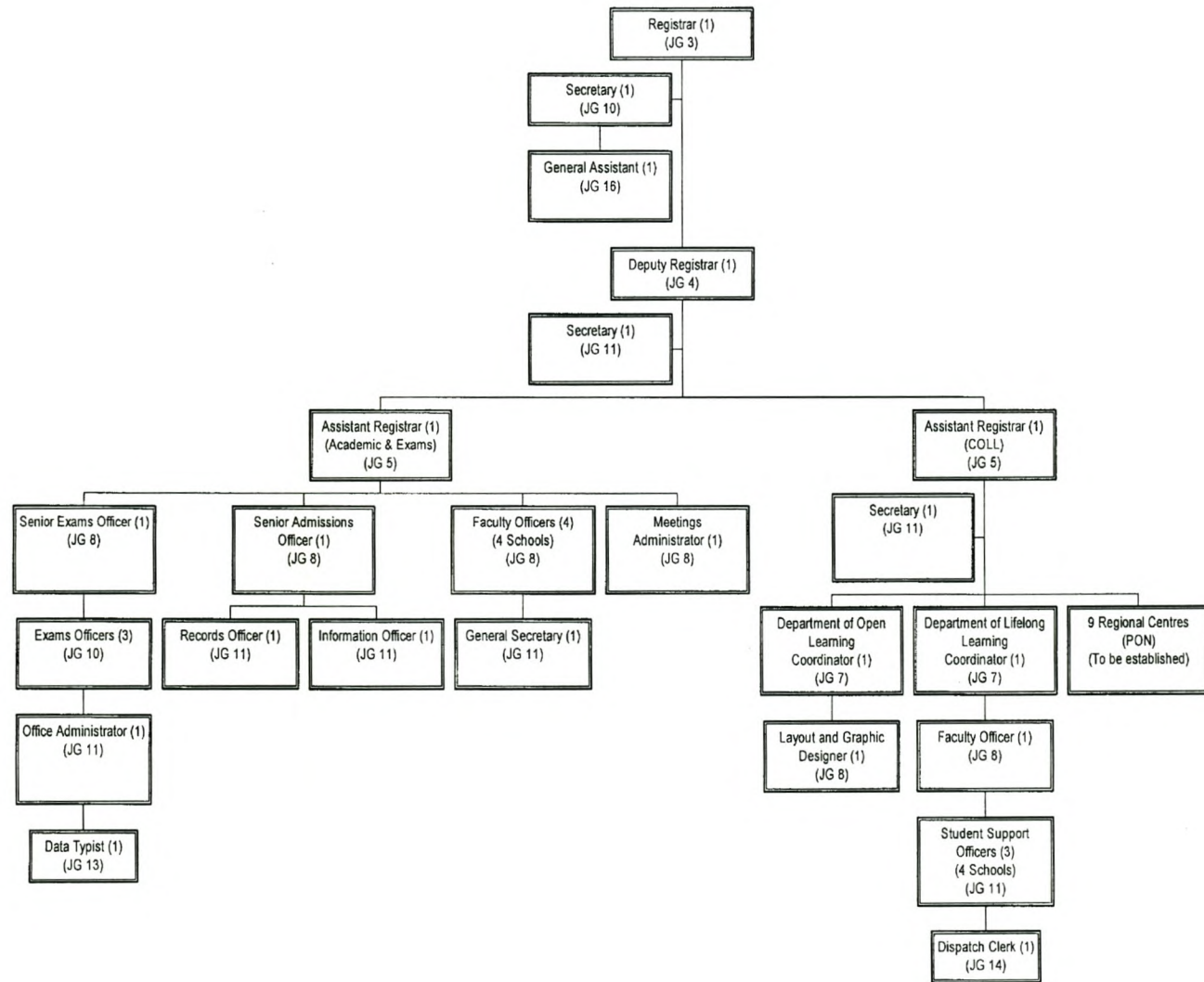
- National Certificate in Police Science (1 year);
- National Higher Certificate in Public Administration (2 years);
- National Higher Certificate in Police Science (2 years);
- National Diploma in Public Administration (3 years);
- National Diploma in Police Science (3 years);
- B.Tech in Nature Conservation (2 years); and
- B.Tech in Agriculture Management (2 years).

(PoN Prospectus, 2001, p. 128).

The bachelor of technology degrees in nature conservation and agricultural management are offered in conjunction with TSA by a special arrangement.

In coming years, the COLL plans to introduce current and new conventional certificate, diploma and degree courses in financial accounting, human resources management, commerce, marketing and traffic science in the distance education mode.

Figure 11: Organisational structure of the office of the registrar at the Polytechnic of Namibia since 2000



5.4.3.4. Allocation of distance education functions within the Polytechnic of Namibia

For the purpose of this dissertation the functions identified as part of the interrelated sub-systems of the normative distance education model will be used to determine the role of all stakeholders involved in distance education at the macro- and micro-level. On the macro-management level the functions related to the policy-making subsystem will be listed in a matrix format and divided amongst stakeholders on the national/state and institutional level. The functions related to the institutional management sub-system will determine its applicability and non-applicability on institutional level.

In terms of the micro-management level the current arrangements regarding the division of distance education functions amongst all stakeholders in the PoN will be listed in a matrix format. The functions will be divided amongst the following stakeholders:

- COLL;
- other unit(s) of the PoN;
- academic schools and departments; and
- person or body outside the PoN.

Some of the functions are currently undertaken by all stakeholders within the PoN. In this regard the stakeholder who is primarily responsible for the function will be marked with a "Primary X". Although the primary responsible stakeholder is identified, some of the functions are currently not undertaken by the responsible stakeholder, and will therefore also be indicated with a *(not done at present) sign.

Table 15: Allocation of the policy-making functions on national/state and institutional/Polytechnic of Namibia level within Namibia

FUNCTION	NATIONAL/STATE LEVEL	INSTITUTIONAL LEVEL/PoN
Setting policy objectives	X	X
Democratic participating in determining policy	X	X
Accommodating needs and values of the public	X	X
Measurement of potential impacts	X	X
Measurement of costs	X	X
Infrastructure and organisational support for policy	X	X

In terms of the functions related to the policy-making sub-system on the national/state level the following observations can be made:

- On national/state level the government of Namibia has laid down clear policy objectives to meet the needs and especially the educational needs of the people of the country. In this regard article 20 of Namibia's constitution, adapted in 1990 provides for education as the right of all residents and for compulsory primary education for all children. In order to achieve this goal a unified structure for educational administration was created and set up in 1991. By 1993 a basic document setting out the government's vision for education, culture and training was published, namely "Towards Education for All". This policy document focused attention on five main goals for the educational sector, namely, access, equity, democracy, quality and efficiency.

- The main aim of the government of Namibia's strategy for the development of higher education is "to fashion a mix of central direction and control and an openness to innovation and diversity". (MHEVTST, 1998, p. 7) This policy ensures multiple pathways for students to enter and complete their studies at post-secondary level. In addition, it attaches a high value to the independence and self-governance of tertiary institutions, allowing them great latitude in determining which programmes are offered, who may be admitted and what standards must be achieved in order to qualify for academic awards (MHEVTST, 1998, p.7)
- Even before independence, it was recognized that distance education has the potential to address Namibia's educational and training needs in a cost effective manner. The experience of other countries has shown that courses of comparable or higher quality can be provided through distance education at considerably lower unit costs. Furthermore, distance education has the flexibility to accommodate varying levels of enrolments and the capacity to reach out to all corners of the country. As the White Paper on Higher Education notes:

...distance education can in the very near future offer the majority of Namibian adults the most economic, effective, and available opportunities to seek tertiary level qualifications. Limited financial resources, family and professional responsibilities, and geography make other alternatives unaffordable or inaccessible (MHEVTST, 1998, p.68).

- Since 1990, there has been considerable progress in transforming Namibia's education system at all levels. Reforms at secondary level have led to a more balanced curriculum and dramatic increases in the number of successful students. The government also set up four, publicly-funded

institutions with the mandate to provide distance education opportunities for Namibian students, namely:

The UNAM was established by an act of Parliament in August 1992 to serve as a center of higher learning and research. In terms of its founding act, the university aims, inter alia “to provide extension services” and “to further training and continuing education”. In order to fulfill this part of its mandate, UNAM established a CES in 1993 to provide tertiary-level distance education for students who cannot attend full-time courses at the university’s main campus in Windhoek. In 1999, over 1 100 students were enrolled with the CES.

In 1995, the PoN was established to take over the activities of technikon and the COST of the former Academy. The PoN also established a distance education unit to extend educational opportunities to those who lived outside of Windhoek or who wished to study on a part-time basis. In 1999, over 850 people were studying for tertiary qualifications through programmes offered by the COLL.

NIED was established in 1991 as a head office unit of the MBEC to spearhead reform of the formal education system. Because of the large number of unqualified teachers in Namibian schools, NIED was given responsibility for developing the In-Service Basic Education Teachers’ Diploma as a distance education course. In conjunction with the MBEC’s teachers’ resource centres and in-service units and the colleges of education, NIED provides this programme for about 1 800 serving teachers in 1999.

NAMCOL was created as a dedicated distance institution to address the needs of out-of-school youths and adults who cannot or do not wish to take part in conventional school-based education. NAMCOL provides alternative secondary education programmes for over 20 000 students each year through either distance education or evening classes.

- While the Government of Namibia wishes to encourage diversity in the higher education sector, centralised direction is still required to ensure that the public interest is not overloaded by institutions pursuing their separate priorities. In this regard the MHEVTST provides centralized direction in terms of higher education within Namibia. In this regard the budgets of all institutions of higher learning, for example the PoN and UNAM, is approved by the MHEVTST.

In terms of policy making on institutional level, namely the PON, the following is observed:

- In terms of section 4 of the PoN Act, 1994, the policy-making body responsible for overseeing policies with regard to governance, performance and procurement.
- The senate of the PON is the academic policy-making body of the institution.
- In terms of section 4 of the PoN Act, 1994, the PON is mandated to provide a “post-secondary career education and continuing education at a post-secondary school level”, though no specific reference is made to distance education. Nevertheless, a decision was taken to establish a separate DEC, later changed to COLL, in order to facilitate the delivery of programmes on distance education.
- Policy directions regarding distance education are made by senate, on direction of the academic department and schools.

Table 16: Allocation of the institutional management functions at the Polytechnic of Namibia

FUNCTION	APPLIED	NOT APPLICABLE
Planning	X	
Organising	X	
Financing	X	
Leadership	X	
Staffing	X	
Control	X	

- Planning: The vision and mission statements of the PoN indicates that proper planning was done. The vision of the PoN is to become a leading institution, contributing to the development of Namibia by providing post-secondary career-oriented education in applied science and technology at internationally recommended standards. The mission is using the constitution of Namibia as a basis, the PoN strives to develop the national socio economic system through the provision of higher education (PoN Prospectus 2001, p xx). Thus, it meets the professional and human needs of the country. Furthermore, the adaption of the PoN five year strategic plan (PSP – 1, 1999-2001), in 2000 is an example of proper planning. The strategic plan is designed to serve as a foundation document for systematic institutional development. The strategic plan provides a compelling vision by providing, on the one hand an institution wide survey of the development preferences and needs of its constituents and on the other hand, a channeling by prioritisation and re-direction of institutional resources towards a consensus institutional development plan (PSP –1, 1999, p.2).

- As far as distance education is concerned, the PSP –1, recognised that in the next few years there will be great opportunities in distance education and outreach to the professional community. The PoN currently has in addition to its full time and part-time modes, a distance education and continuing education programme, but there are great opportunities to expand this programme and integrate it into the curriculum. Technological advances and national trends to point to undeniable opportunities for expanding the institutions teaching mission in distance education (PSP-1, 1999, p. 28 –29).
- Organising: The organisational structure of the PoN is determined by the PoN Act, Act 33 of 1994, the statutes, its mission, strategic aim and objectives, human resources requirements, functional division of activities and job or post structures. The PoN is governed by a council as its supreme policy making body. The senate is responsible for the academic matters and the rector the chief academic and administrative officer. The student body is represented by the students representative council. During 1999, the first PSP-1 was formulated and approved. Consistent with the PSP-1 the council approved the implementation of new administrative and academic structures. See figure 9, page 164, for an organisational structure of the PoN. The PoN academic programmes emanate from the four schools of business and management, communication, legal and secretarial studies, engineering and information technology, and national resources and tourism. The new structure provides for the establishment of institutional centers of competencies, namely, applied research and technology, computer services in education, entrepreneurial development, teaching and learning and open and lifelong learning. It is envisaged that the centers will systematically enhance the targeted areas of institutional capacity for focusing on refinement of specific competencies.

As far as the administrative structures are concerned, the following offices are responsible for the administration of the PoN, namely, the office of the registrar, office of the bursar, the computer services bureau, the library, the dean of students and institutional development and fundraising unit. The COLL resides under the office of the registrar see figure 10, p. 165).

- **Financing:** The mainstay of higher education funding has been, and still is the government, which in the case of the PoN has contributed about 70% to the recent budget, and rarely fill funding for capital projects. (PoN Annual Report, 2000, p. 4) Over the past five years, there has been no standard formula applied in the allocation of capital. The line ministry (MHEVTST) receives a bulk fund, after budget presentations by the different stakeholders, which becomes divided amongst the institutions. In 1998 a new approach was implemented in preparing for the 1999 budget, namely, the allocation of funds was based on projects and their significance. The budget of COLL forms part of the budget of the office of the registrar. Over the last five years the PoN has operated and planned to make do with reasonable funding from the government of Namibia, resulting in good financial performance.
- **Leading:** The single dominating impulse that runs through the vision of the PoN future is centred around the opportunity that the PoN as one of only two institutions of higher education to be involved in the development of the human potential in Namibia. The vision of the PoN is therefore to champion the development on a national scale, of quality applied science and technology education. In this regard the PoN has made unprecedented progress and an investment in science and technology in Namibia. The progress has been deliberate and targeted because the PoN consider science and technology to be the foundation discipline that transcend the general thrust of national development, and go to the heart of individual career building (PSP-1, 1999, p. 14).

- Staffing: Staffing arrangements at the PoN function according to the Human Resources Code (HRC), which was adapted in 1998. This code and all future amendments thereto is subject to the Constitution of Namibia, all the acts promulgated by the parliament pertaining to, and having a bearing on the staff policies of the PoN, as well as the PoN Act, 1994, and the statutes and regulations of the PoN. The PoN is an equal opportunity employer. The PoN condemns any form of discrimination on the basis of colour, culture, ethnic origin, gender economic or social statuses, politics or religion (HRC, 1998, p.4). During the 2000 academic year the staff complement at the PoN numbered 430. This complement counts of 149 permanent and 9 contract administrative staff. Of the 272 academic staff 63 were permanent, 51 contract and 97 part-time, while 61 supported the COLL (PoN Annual Report, 2000, p. 15).
- Control: The PoN has substantive quality assurance policies and procedures already in place. An overview of these can be found in the PoN Prospectus which gives the mission and values of the institution, a profile of the programmes on offer, the planning and reporting processes, the principles, the accountabilities, student entry guidance and support systems, assessment, etcetera. Additionally policies for distance education, multi-campus programme delivery as well as consortium delivery arrangements are included. In practice, the monitoring of efficacy of quality processes take place through a combination of school boards, reports from external examiners and moderators, various committees and regular staff and student surveys.

Quality assurance is at the heart of all PoN's services, academic, administrative and auxiliary. The Quality Assurance committee (QAC) ascertains that the system of internal control is adequate to maintain optimum standards and quality in all the services provided by the PoN.

The QAC rigorously review the quality control procedures with a view to examining that (i) the quality control processes for teaching, learning and research are working satisfactorily, and (ii) the existing quality activities are in line with the PoN quality management system. Furthermore, the PoN on a yearly basis submit annual reports to the Namibian parliament for consideration.

Table 17: Allocation of the distance education management and administration activities within the Polytechnic of Namibia

FUNCTION	OTHER UNIT OF PON	ACADEMIC SCHOOL OR DEPARTMENT	COLL	PERSON OR BODY OUTSIDE PON
Market and publicise programmes	IDF		Primary X	RASSOs NOLNet
Provide information on programmes	Registrar IDF		Primary X	RASSOs
Process student applications	Primarily Registrar		X	RASSOs
Process student registrations	Primarily Registrar		X	RASSOs
Keep student records	Primarily Registrar			
Answer student queries in relation to administrative matters			Primary X	RASSOs
Process payments from students	Primarily Bursar			RASSOs
Process claims by part-time staff			Primary X	RASSOs
Process invoices from suppliers	Primarily Bursar		X	
Administer assignment process			X	RASSOs
Administer examination process	Primarily Registrar		X	RASSOs
Cost and budget distance education activities			X	

In terms of the functions related to the management and administrative sub-system, the PoN complies sufficiently with most of the functions. In this regard the PoN:

- gives information to prospective students on current and new programmes to be offered in the distance education mode. This is made possible through the office of the registrar and the nine regional UNAM centers;
- the PoN, through the office of the registrar, processes applications, registers current and prospective distance education students and keeps proper student records;
- administrative staff at the COLL, and the regional administrative and student support officers (RASSOs) in charge of the regional centres, handle all student queries related to administrative matters;
- payments from students are administered by the office of the bursar, in cooperation with the office of the registrar;
- the three student support officers at the COLL administer the assignment process. Assignments are received, recorded, marked and sent back to students within four weeks;
- the examination process is administered by the office of the registrar, through the examinations department at the PoN;
- claims received from part-time educators are processed by the COLL; and
- the COLL takes responsibility for the annual costing and budgeting of all distance education activities at the PoN.

Table 18: Allocation of the distance education courseware development activities within the Polytechnic of Namibia.

FUNCTION	OTHER UNIT OF PON	ACADEMIC SCHOOL OR DEPARTMENT	COLL	PERSON OR BODY OUTSIDE PON
Generate ideas for programmes	X	Primary X	X	X
Market research on programmes	IDF		*Primary X	
Coordinate courseware development process			Primary X	
Devise curriculum and syllabus		Primary X		
Write courseware		Primary X		X
Edit courseware for content		Primary X		X
Edit courseware for language		X	*Primary X	X
Edit courseware for DISTANCE EDUCATION methodology			*Primary X	
Lay out of courseware and DTP	Print Unit		*Primary X	
Print courseware	Print Unit			
Store and distribute courseware			Primary X	RASSOs
Devise assessment tools (assignments)		Primary X		Tutors
Carry out assessment (mark examination sripts)		Primary X		Tutors
Moderate assessment		Primary X		External Moderators
Award credit	Senate			
Review and evaluate programmes		Primary X	X	

The current arrangements regarding courseware development at the PoN are as follows:

- the COLL generates ideas for new programmes to be offered in the distance education mode;
- courseware writers are recruited from the academic staff at the PoN;
- the COLL coordinates the courseware development process;
- a single writer approach is used in the development of courseware;
- a moderator is appointed by the respective academic school or department to act as a content expert only;
- the courseware writer is expected to act as language editor, edit the material for distance education methodology and do the layout and DTP of the courseware;
- courseware writers are required to develop student friendly and interactive courseware within less than 12 months;
- courseware is printed by the printing unit at the PoN;
- courseware are stored and distributed by the COLL;
- the COLL distributes courseware to students via mail or students can collect the courseware at the COLL in Windhoek or at the nine regional UNAM centers;
- printed courseware remains the most important medium in distance education, while audio cassettes are used on a limited scale in the teaching of distance education students at the PoN;
- assessment tools, for example, determining the number of assignments, the number of examinations and the moderation of examination papers and scripts are devised and carried out by the academic schools and departments, and approved by the senate of the PoN;
- programmes are evaluated and revised by the academic schools and departments at the PoN; and
- the senate of the PoN awards credit for courses passed.

Table 19: Allocation of the distance education student support activities within the Polytechnic on Namibia

FUNCTION	OTHER UNIT OF PON	ACADEMIC SCHOOL OR DEPARTMENT	COLL	PERSON OR BODY OUTSIDE PON
Provide guidance on programme choices	Registrar	X		RASSOs
Provide counselling in relation to studies	*Dean of Students			
Answer student queries in relation to their studies		X		Primarily Tutors
Conduct tutorial sessions		X		Primarily Tutors
Organise tutorials and vacation schools			Primary X	
Provide tutorial support		Primary X	X	
Organise and support study groups			*Primary X	RASSOs
Provide library and study facilities	Library			ROCs
Train and support students in the use of new technologies		*IT Dept.		
Monitor and co-ordinate student support			Primary X	
Champion and act as advocate for students			Primary X	

Current arrangements regarding the provision of student support services at the PoN can be summarised as follows:

- the office of the registrar, through the faculty officers and the RASSOs, provide guidance on programmes to prospective distance education students;

- no guidance and counseling are currently provided to distance education students regarding study skills and study habits;
- academic student support is currently provided during three vacation schools on the PoN campus in the capital, Windhoek. Attendance of these vacation schools is optional. During the three vacation schools tutorial classes are conducted by the part-time educators;
- in collaboration with the nine regional UNAM centres, weekend classes are organised at the regional centres where students receive tutorial support. The current policy of the PoN is to appoint educators at the regional center, if five or more students are enrolled for a programme at the respective center. Appointment of educators is done in accordance with the Human Resources Policy at the PoN;
- the PoN also provides student support by means of marked assignments and telephone tutoring;
- currently the PoN recruits educators from the conventional education system and to a lesser extent from other professions and they work for the PoN on a part time basis;
- the library at the PoN campus in Windhoek and the RASSOs at the nine regional UNAM centers provide the necessary library services and study facilities to the distance education students of both the PoN and UNAM;
- currently the PoN does not provide any training or support its students in the use of new technologies; and
- the COLL coordinates and monitors all student support services at the PoN and champions and acts as advocate for distance education students enrolled at the PoN.

5.4.4. Namibian College of Open Learning

Prior to 1990, two pre-tertiary distance education programmes served the needs of Namibian students. The Department of National Education offered educators in the country opportunities to upgrade their qualifications while the NEU enabled those in exile to continue their education. After independence, these programmes were consolidated under the Department of Adult and Non-Formal Education in the Ministry. When NAMCOL was first created as a separate directorate within the Ministry in December 1994, it assumed responsibility for all non-formal programmes for Grade 10 and Grade 12 students. This was the first step towards the establishment of the college as a statutory institution under the direction of a board of governors appointed by the minister. This process was completed in April 1998 when NAMCOL took over all alternative secondary education programmes previously offered by the MBECYS.

NAMCOL was created specifically as an open learning institution to address the needs of out-of-school youth and adults who are unable to engage in conventional school-based education. Section 4 of the Namibian College for Open Learning Act 1997, Act 1 of 1997, provides NAMCOL with a broad mandate to design, develop and offer programmes intended to upgrade and enhance levels of general education, professional skills, vocational skills, managerial skills and economic self-improvement.

The act further enjoins NAMCOL to create learning opportunities using modern instructional techniques and technological equipment. Although the act does not place any restrictions on the level of programmes NAMCOL may offer, to date NAMCOL has limited itself to pre-degree offerings in order to avoid competition with other publicly-funded institutions in Namibia.

Traditionally, NAMCOL's core activity has been its programme of alternative secondary education which is based on the same curricula and syllabi used in school. Students can opt to study through either the distance education mode or by means of face-to-face tutorials at one of approximately eighty centres around the country. Approximately half of NAMCOL's students opt for face-to-face tuition. However, while these tutorials resemble teaching in a conventional classroom environment, students are expected to spend a comparable amount of time in independent study if they are to pass the examination. In addition, NAMCOL offers a distance education programme leading to the Certificate in Education for Development in conjunction with UNISA Adult Basic Education Training Institute. A recent report on market options for NAMCOL recommends further investigation of the following areas:

- bridging programmes to assist students to gain access to tertiary education;
- educational upgrading programmes for company employees;
- practical english programmes;
- training programmes for trade and craft workers;
- business and financial programmes; and
- computer and secretarial programmes.

(Du Vivier; 1999, p. 7)

5.4.5. National Institute for Educational Development

The NIED was established in 1991 to spearhead the reform of the formal education system through curriculum and materials research and development, pre-service and in-service training of teachers and general educational research.

Currently, NIED is a line directorate within the MBECYS, reporting directly to the permanent secretary, though various options for increased autonomy are under discussion. With the introduction of the BETD as the standard qualification for instructors in Grades 1 - 10, the four existing colleges of education in Windhoek, Rundu, Oshakati and Katima Mulilo were assigned responsibility for offering this programme for pre-service candidates. In addition, an in-service BETD through distance education was envisaged to enable unqualified educators to complete their studies while continuing with their teaching duties. However, because the colleges for education lacked a capacity for distance teaching, NIED became involved in the development and piloting of the in-service programme with funding from the United Nations Development Program and the United Nations Educational and Scientific Organisation.

In 1997, a review of the BETD in-service programme was carried out by an external consultant. As a result of his recommendations, it was decided that the future development and delivery of this programme would be the responsibility of a consortium of institutions, involving NIED, UNAM, the colleges of education and teachers' resource centres. Negotiations are currently taking place to finalise the agreement between the various partners in this venture and it is expected that UNAM will take over management and administration of the programme. NIED will retain control over issues of policy and curriculum (Du Vivier, 1999, p. 7).

5.4.6. Colleges of education

Of the four existing colleges of education, those in Ongwediva and Windhoek have played a role in the development of the BETD in-service programme. In-service units at these two colleges employ a total of five full-time staff who have assisted in the writing of courseware for this programme as well as the provision of administrative, student support and tutorial services. It is expected that these

institutions will continue to play the same role in the consortium which is in the process of formation.

In recent years, not all graduates of the BETD pre-service programme have been able to find posts in the teaching profession, and this suggests that the colleges of education will need to redefine their role in the development of Namibia's education system. One area where there is considerable scope for expansion is in the upgrading of qualifications for serving teachers. Given the classroom commitments of the existing teaching force, distance education offer a cost-effective approach to in-service and continuing education for this group. Thus the prospect of further involvement in this field by the colleges of education cannot be ruled out (Du Vivier, 1999, p. 7).

5.4.7. Namibian Broadcasting Corporation

In 1991, the NBC took over responsibility for all television and radio services formerly provided by the South West Africa Broadcasting Corporation. The objectives of the NBC include informing the public, contributing to the education of the nation, disseminating information about social and economic development and promoting the use of English as the official language of Namibia.

During 1999 the NBC employed three full-time staff in its educational broadcasting unit for radio, which provides 6¾ hours of programming each week. Another two staff members were assigned to administer 4½ hours per week of educational television programmes most of which are purchased abroad. The time allocated for educational broadcasting is currently limited by the NBC's capacity to produce suitable programmes.

During the mid-1990s, the "Let's Speak English" series of radio broadcasts was produced by the NBC in conjunction with the Directorate of Adult and Continuing Education (from which NAMCOL emerged). In recent years the NBC worked with the MBECYS and NAMCOL to produce a series of IGCSE weekly radio programmes to assist students in a wide range of school subjects. Twenty half-hour programmes in English as a second language were produced and broadcast in 1997/98 and a similar series for history and geography was produced. In addition, as part of its continuing education programme, UNAM's CES produced a series of radio broadcasts with the assistance of the NBC (Du Vivier, 1999, p. 8).

5.5 DISTANCE EDUCATION ENROLMENT FIGURES FOR PUBLICLY-FUNDED INSTITUTIONS IN NAMIBIA

In order to derive some estimate of the potential demand for distance education programmes in Namibia, statistics on actual enrolments with publicly-funded institutions were collected for the years 1995 – 1998. In addition, these institutions provide projections of student numbers for the years 1999 – 2004. Detailed figures are included in tables 20, 21, 22, 23 and summarised in table 24.

Table 20: Actual (1995-1998) and projected (1999-2004) enrolments at the Namibian College of Open Learning

Programmes	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alternative Secondary Ed. Distance Mode	956	5 552	8 403	9 709	9 865	8 925	9 143	11 380	11 960	12 878
Alternative Secondary Ed. Face-to-Face Mode	5 589	5 330	8 197	10 388	9 865	8 925	9 142	11 380	11 960	12 877
Certificate in Education for Development	Introduced in 1997		40	75	94	120	120	120	120	120
Practical English Courses	To be introduced on a pilot basis in 1999				250	400	700	1 000	1 000	1 000
New Courses / Programmes	To be introduced in 2001 onwards						200	500	1 000	2 000
Courses for Trade and Craft Workers	To be introduced in 2001 onwards						100	200	300	300
TOTAL ENROLMENT	6 545	10 882	16 640	20 172	20 074	18 370	19 405	24 580	26 340	29 175

(NAMCOL, 2000, p. 20)

Table 21: Actual (1995-1998) and projected (1999-2004) enrolments at the University of Namibia, Center for External Studies

Programmes	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Higher Primary Education Certificate				179	50	To be phased out.				
Education Certificate Primary				Phased out						
Diploma in Education: African Languages				274	300	300	300	300	300	300
Bachelor of Nursing Science (Advanced Practice)				261	310	370	400	350	350	350
Bachelor of Education				235	500	610	700	750	750	750
Bachelor of Business Administration	Introduced in 1998			8	50	240	400	550	680	750
Other Courses							200	400	500	600
TOTAL ENROLMENT	1 034	1 804	543	957	1 110	1 520	2 000	2 350	2 580	2 750

(Dodds (1999) in Du Vivier, 1999, p. 29)

Table 22: Actual (1995-1998) and projected (1999-2004) enrolments at the Polytechnic of Namibia, Centre for Open and Lifelong Learning

Programmes	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
National Education Certificate	78	84	44	Phased out						
Education Certificate Primary (Senior)	114	80	21	Phased out						
Education Certification Primary (Junior)	8	24	Phased out							
National Diploma: Public Administration	380	811	1 331	587	671	677	700	Phased out		
								600	500	400
National Diploma: Police Science	180	218	204	176	174	135	150	160	170	180
Bachelor of Technology: Nature Conservation	Enrollment every second year				9	6	20	20	30	30
Bachelor of Technology: Agricultural Management	Enrollment every second year					25	25	30	30	40
National Diploma: Accounting	To be introduced in 2002							100	200	300
National Diploma: Marketing	To be introduced in 2002							100	200	300
National Diploma: Human Resources Management	To be introduced in 2002							100	200	300
National Diploma: Public Management	To be introduced in 2002							500	600	700
TOTAL ENROLMENT	760	1 214	1 600	763	880	843	895	1 610	1 930	2 250

(Keyter (1999) in Du Vivier, 1999, p. 30)

Table 23: Actual (1995-1998) and projected (1999-2004) enrolments at the National Institute of Educational Development

Programmes	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Basic Education Teacher's Diploma: In-Service	474	975	1 386	1 825	2 500	3 000	3 500	4 000	4 000	3 000

(Fourie (1999) in DuVivier, 1999, p. 31)

Table 24: Enrolments in publicly-funded distance education institutions by centre/region for 1998

CENTRES	REGIONS	UNAM CES	PoN DEC	BETD INSET	NAMCOL		TOTALS
					DE	F-F	
Oshakati	Omusati	531 at UNAM Oshakati Campus	112 at UNAM Oshakati Campus	924 at Ongwe- diva TRC	1 343	1 771	9 574
	Oshana				1 403	1 627	
	Ohangwena				887	976	
Tsumeb	Oshikoto	32	34		806	885	1 757
Rundu	Okavango	41	27	321	520	940	1 849
Katima Mulilo	Caprivi	29	48	134	715	561	1 487
Otiwarongo	Otjozondjupa	39	13		466	608	1 126
Khorixas	Kunene	16	5	199	275	239	734
Swakopmund	Erongo	15	61		538	420	1 034
Gobabis	Omaheke	57	25		205	219	506
Windhoek	Khomas	159	416	129	1 968	2 057	4 729
Keetmashoop	Karas	14	22	118	308	1	731
	Hardap				268	0	
Region or Mode Not Stated		23	14		166		203
TOTAL ENROLMENTS		956	777	1 825	20 172		23 730

(DuVivier, 1999, p. 32)

According to the statistics on actual enrolment with public-funded institutions it is clear that there is an increase of student numbers from just 8 800 students in 1995 to over 23 700 in 1998. The number of distance education students in 1998 was equivalent to 13 percent of those studying full-time at senior secondary schools and 32 percent of those studying at tertiary level. By the year 2004, it is expected that over 36 000 Namibians will be enrolled with publicly-funded institutions involved in distance education.

5.6 CONCLUSION

Namibia is a large country with a very unevenly spread population. Its previous education history has led to an equally uneven distribution of tertiary education

among its different communities. These two factors, namely size and unequal access to the education system, make it essential to use distance education facilities to reach out to all corners of the country and to redress the inherited inequities.

Due to financial constraints and Namibia's inability to release large numbers of professional, managerial, and para-professional staff for extended periods of in-service full-time training or upgrading, distance education has become viable alternatives in addressing the needs of the people especially in Northern Namibia where the previously most disadvantaged majority live and work. As far as tertiary education opportunities are concerned, the present institutional infrastructure at tertiary level that could permit a part-time alternative towards educational opportunities does not exist throughout the country.

The last decade has seen significant developments in tertiary distance education in Namibia. In the years preceding independence two distance education programmes functioned within the country, namely at the former Academy for Tertiary Education and the former Department of National Education. A third programme operated in exile, namely the NEU. After independence major changes took place as far as distance education were concerned. In this regard, the former DDT at the Academy for Tertiary Education became the CES at the new UNAM, managing and servicing distance education programmes of both UNAM and the PoN through 1996. In 1997 the PoN started its own DEC. The DEU at the former Department of National Education and the NEU formed the basis for creating the NAMCOL, which was established in 1997 as a parastatal body responsible for pre-tertiary distance education.

Both UNAM and the PoN are involved in the provision of tertiary distance education in Namibia. However the institutions differ in terms of structure and

functions. This difference can be ascribed to the placement of distance education in both institutions of higher education. The CES at UNAM has faculty status and is responsible for both academic and administrative distance education activities, while the COLL at the PoN is considered an administrative support unit with no academic and pedagogical responsibility. Although the PoN 's activities regarding distance education was described in terms of the three micro-management interrelated sub-systems, the writer concluded that the activities related to these three interrelated sub-systems, are handled by one person in the COLL. The coordinator is responsible for coordinating and handling all these distance education activities.

In Chapter 6 an evaluation will be made between the normative management model of distance education and the present model of distance education in operation at the PoN.

CHAPTER 6

DISTANCE EDUCATION AT THE POLYTECHNIC OF NAMIBIA: AN EVALUATION.

6.1. INTRODUCTION

The study undertaken for this dissertation has resulted in the formulation of a number of general guidelines regarding distance education (Chapter 2), the different models of distance education (Chapter 3), a normative model for distance education (Chapter 4) and a description of the current situation regarding distance education in Namibia and specifically at the PoN (Chapter 5). The purpose of this chapter is therefore to draw a comparison between the normative model of distance education and the current situation at the PoN and make an evaluation thereof. In this regard the functions identified as part of a well-functioning model will be used to compare the current model of distance education used at the PoN.

The evaluation will be based on observations made by the writer and in terms of the theory and practice of distance education management. The writer will make an objective evaluation and will refrain from subjectivity as far as possible. As part of the evaluative comparison between the practical application of distance education at the PoN and the normative model for distance education, the writer will identify some general statements regarding peculiarities amongst the organisation of distance education institutions. The terms management and administration will also be defined for evaluative purposes.

6.2. PECULIARITIES OF INSTITUTIONS INVOLVED IN DISTANCE EDUCATION PROGRAMMMES

Some general statements can be made regarding the peculiarities of the organisation of distance education institutions. The following is a list of such peculiarities:

- distance education institutions use a variety of teaching modes, such as individualised study, supervised study, group study, occasional face-to-face meetings and electronic media as part of their teaching strategy. Adapting all these methods causes the role of the educator to change from that of an instructor or dispenser of knowledge to that of resource person or facilitator;
- several specialists are involved in the organisation of distance education programmes. These are educators, communication specialists, technicians and artists. The requirements of these different specialists are often in conflict as regards style, terminology and objectives. Therefore, a great deal of effort must be made to harmonise them;
- distance education institutions depend on other institutions for the provision and distribution of their programmes. Distance education institutions also depend upon transport agencies, as well as the post office and private courier services to distribute courseware to distance education students. The good work of a distance education institution can be jeopardised by the negligence of any of these institutions. This implies that distance education institutions are hardly self reliant in their operations;
- industrial processes are used in the production and distribution of courseware;
- the production and distribution of courseware are carried out on a large scale over the whole country as in the case with the distance education

programmes of the PoN, or over the whole world as in the case with the distance education programmes of UNISA that runs distance education programmes throughout the world; and

- the relatively short history of distance education makes the personnel working in them less experienced than those working in conventional educational institutions that have a long history of existence. Distance education institutions therefore lack firm standards and models of management and administration.

6.3. THE TERMS "MANAGEMENT" AND "ADMINISTRATION" AS APPLIED IN THIS DISSERTATION

The terms "management" and "administration" is broadly used in this dissertation. However, for the purpose of evaluation the writer has defined the terms "management" and "administration" in education, and more specifically in distance education in Chapter 4, pages 112 - 115.

Educational management differs from private management, because educational management is provided as part of public management by the government, government-aided institutions or non-governmental institutions with no profit motive. Within Namibia the aim of education is to provide the best quality education and skills, possible within the limited resources available.

In Namibia, much attention is currently focussed on the need for effective management of government subsidised education, that is both school and other conventional face-to-face institutions, for example, UNAM, the PoN and the colleges of teacher education.

It is, however, required from these institutions that they have proper internal and external management structures to provide effective levels of leadership and accountability. These management structures should comprise all stakeholders from within and outside the institution. The most important management functions, which apply in both conventional face-to-face institutions and distance education institutions, are:

- policy-making;
- planning;
- organisation;
- leadership;
- staffing;
- workprocedures; and
- control.

The main purpose of administration is to assist students to benefit as much as possible from the learning and teaching programme. Poor administration is very disruptive and discouraging for distance students.

For the purpose of this dissertation and evaluation, good management encompasses administration. Administration as a function of management is essential for the smooth running of a programme or institution involved in distance education.

In the following section the PoN will be evaluated in terms of the interrelated sub-systems identified as part of the normative model. The assessment criteria as indicated in table 25, together with an explanation of each one, will be used in the evaluation of each of the five sub-systems.

Table 25: Assessment criteria

CRITERIA	EXPLANATION
Does not comply at all	Implies that the PoN is not at all engaged in the function listed and that the function is not defined, motivated, listed or implemented at all.
Complies to a limited extent	Implies that the PoN is partially involved in the function listed and that the function is not clearly defined, motivated and is insufficiently implemented.
Complies sufficiently	Implies that the PoN is adequately involved in the listed function and that the function is defined, accepted, supported and implemented regularly.
Complies excellently	Implies that the PoN is fully engaged in the function listed, the function is clearly defined and motivated, and there is a shared responsibility and involvement of all stakeholders within the institution

According to the normative management model, it consists of both macro and micro-management interrelated sub-systems. In this regard the macro-management interrelated sub-systems will be evaluated first.

6.4. POLICY-MAKING SUB-SYSTEM

It is commonly known that public administration takes place in a political milieu and only after the legislative authority has decided that specific administrative actions should be taken. Although the administrative functions are regarded as being equal in all respects, it is obvious that policy-making can be regarded as the first among a group of equals and is indeed the enabling function, because it provides a framework and is an instrument for action.

The functions identified in Chapter 4, page 129, and listed in table 15, relating to the policy-making sub-system will be used to evaluate the situation on national and institutional level. Each of the functions will be evaluated in terms of the four criteria as identified in table 25.

Table 26: Distance education functions related to the policy-making sub-system on the national and institutional level

FUNCTIONS	DOES NOT COMPLY AT ALL	COMPLIES TO A LIMITED EXTENT	COMPLIES SUFFICIENTLY	COMPLIES EXCELLENTLY
Setting policy objectives				X
Democratic participation in determining policy				X
Accommodating needs and values of the public				X
Measurement of potential impacts				X
Measurement of costs				X
Infrastructure and organisational support for policy decisions				X

From the above-mentioned evaluation it is obvious that on both the national and institutional level the process of policy-making complies excellently with the

functions related to the policy-making sub-system on national and institutional level. The process of policy-making as indicated in Chapter 5, pages 173 - 176, at both the national and institutional levels makes provision for identifying the needs and demands of society, the direction in which the legislative authority or institution wants to move society and what will contribute most to the common weal.

Distance education cannot simply grow on the back of existing educational structures and policies. Policies must be created, and for that purpose policy-making organs must be set up. As indicated in Chapter 5, pages 173 - 176, the government of Namibia has made provision for commissions on national level to investigate the educational system in Namibia on to made recommendations. On institutional level the PoN makes provision for internal structures to determine policy direction for the institution. In both, task forces representing the interested parties prepared policies for adoption by the national and institutional management.

The second interrelated sub-system on macro-management level will be evaluated next.

6.5. INSTITUTIONAL MANAGEMENT SUB-SYSTEM

The purpose or function of all public institutions is to promote the general welfare of society by implementing national policy. Public institutions, for example the PoN exist to meet society's needs. In order to provide an effective and efficient service, public institutions should be properly managed. This entails the carrying out of a number of basic generic management functions, as reflected in Chapter

4, page 130, and listed in table 16. Each of the functions will be evaluated in terms of the four criteria identified in table 25.

Table 27: The functions related to the institutional management sub-system

FUNCTION	DOES NOT COMPLY AT ALL	COMPLIES TO LIMITED EXTENT	COMPLIES SUFFICIENTLY	COMPLIES EXCELLENTLY
Planning				X
Organising				X
Financing				X
Leadership				X
Staffing				X
Control				X

From the above-mentioned evaluation it is obvious that the PoN complies excellently with the functions related to the institutional management sub-system. The PoN is properly structured and managed to meet its goals and objectives as indicated in its vision and mission statement. As indicated in Chapter 5, pages 178 - 181, internal regulators such as internal policy, procedures and standards serve as guidelines for the internal functioning of the PoN.

As indicated in Chapter 5, page 177, planning is one of the critical management tasks to be performed. In this regard the PoN has formulated goals and objectives for the institution, balancing aspirations with available resources, assessing changes in student, business and societal demands and projecting resources and financial needs. Resources include choosing the best delivery system and the proper use of facilities.

The PoN is organised in such a way that it meets the needs of society and students see figure 9, page 164. Financing decisions lie at the heart of any management. In Chapter 5, page 179, it is indicated that the PoN allocates funds

to different components within the institution to function effectively. Priorities are set for the institution according to the availability of funds.

Some of the staffing issues of concern to managers of distance education are whether to hire permanent or part-time employees. The PoN, Chapter 5, page 180, appointed contract staff to deal with distance education activities. In terms of its vision statement the PoN plays a leading role in providing career-orientated education and training to students through the conventional and distance education mode. Control and quality assurance is also a primary function of management at the PoN.

The next part will focus on the interrelated sub-systems related to micro-management.

6.6. MANAGEMENT AND ADMINISTRATION SUB-SYSTEM

In terms of the micro-management level, administrative and managerial support forms the backbone of any distance education programme, because they provide the students' only channel into the education system. Unlike students in a face-to-face situation, distance education students have no alternative means of bypassing the system to get their message across, for example, the students cannot easily contact another source if an enrolment officer cannot or does not provide the necessary information. It is through the administrative staff that all information, resources and communication are relayed from the educational institution to the student and from the student to the educational institution including courseware, instructions, assignments, accreditation procedures, examinations and counselling.

The functions identified in Chapter 4, page 131, and listed in table 17, relating to the management and administrative sub-system will be used to evaluate the situation at the PoN. Each of the functions will be evaluated in terms of the four criteria as identified in table 25. As part of the evaluation of the management and administrative sub-system, the current institutional framework will also be evaluated.

Table: 28: Distance education functions related to the management and administration sub-system

FUNCTIONS	DOES NOT COMPLY AT ALL	COMPLIES TO A LIMITED EXTENT	COMPLIES SUFFICIENTLY	COMPLIES EXCELLENTLY
Market and publicise programmes		X		
Provide information on programmes			X	
Process student applications			X	
Process student registrations			X	
Keep student records				X
Answer student queries in relation to administrative matters			X	
Process payments from students			X	
Process claims by part-time staff				X
Process invoices from suppliers				X
Administer assignment process			X	
Administer examination process			X	
Cost and budget of distance education activities			X	

From the above-mentioned evaluation it is obvious that the PoN is fully engaged in record keeping of distance education student records, the processing of claims from part-time staff and the processing of invoices from suppliers. However, as

far as the marketing and publicity of distance education programmes are concerned, the PoN is only engaged to a limited extent, through the IDF.

The PoN complies sufficiently with the remaining functions. In this regard, students who are appropriately qualified to be considered for enrolment are allowed to register for a limited range of degrees, diplomas and certificates, as indicated in Chapter 5, page 183. Students receive courseware which they follow primarily by correspondence, submitting assignments to be marked and sitting final examinations if they have met the programme requirements. With assistance, students are allowed to demonstrate their achievement by challenging the PoN's standards as evidenced in its examination requirements. Those students who clear the first hurdle then proceed to further years of study under the same conditions.

As indicated in Chapter 5, page 183, the delivery of courseware to distance education students at the PoN is reliable. Assignments are assessed and returned to students within four weeks. Turnaround times of 25 days is the administrative norm for assignments. All turnaround times are monitored by administrative staff within the PoN and corrective action is taken when the maximum time is exceeded.

Answers to students administrative questions are handled personally by administrative staff within the COLL and other units within the PoN, as indicated in Chapter 5, page 183. Administrative procedures are simple and handled electronically. All administrative staff within the COLL know the protocols and procedures for receiving, recording, processing and returning marked assignments. Student records are up to date and routinely available to educators and students on request. Records are also kept by educators and are available for monitoring.

The PoN makes use of the nine UNAM regional centres to handle enrolments, to distribute course materials for students and handle all related administrative queries (see Chapter 5, page 183). This collaborative administrative arrangements are running effectively and efficiently. The PoN as a partner in the NOLNeT initiative is planning a countrywide network of local study centres (see Chapter 3, page 84).

One of the major issues facing planners of a new distance education system is to decide on the kind of institutional framework that should be established. As indicated in Chapter 3, page 69, there are four basic options:

- a purpose-built distance education system;
- a distance learning system embedded within a traditional institution, and drawing on it for many of its needs;
- a small coordinating body which brings together and co-ordinates the experts of other institutions in a network; and
- hybrids.

Three of these models are usually referred to in the literature as the autonomous or single-mode, the mixed or dual mode, and the network model respectively. The advantages and disadvantages of each model have been described in Chapter 3.

The PoN can for the purposes of distance education, be classified as a mixed or dual-mode institution. In this regard the council of the PoN has decided (see Chapter 5, page 166) to set up a centre, named the COLL, within the conventional institution to enlarge its market by teaching students at a distance. This integrated approach has been adopted throughout the PoN, where all

academic schools and departments take responsibility for traditional teaching and off campus teaching of students at a distance.

As described in Chapter 5, page 166, the COLL currently resides under the office of the registrar and coordinates the efforts of the PoN's different academic schools and departments in administering distance education programmes. The COLL is described as one of the academic support units in the same way as auxiliary services has been. Due to the fact that the COLL is regarded as an administrative body, the head of the COLL is answerable to the registrar, who is head of the entire administration of the PoN. The placement of COLL makes it an adjunct rather than at par with academic departments. This arrangement is a serious drawback for the COLL because of conflict of loyalties on the part of staff working in the PoN and teaching both on-campus and distance students. In this regard staff at the PoN consider on-campus students as their first priority to the detriment of the distance students.

On the other hand, dual mode institutions like the PoN have distinct advantages. The dual mode structure offers advantages of integrating work on and off campus, with the same courseware being used in both modes. Students work for an existing qualification, for example, a certificate, higher certificate, diploma or degree, so that there is no question about recognition or acceptability.

In setting up the COLL, the PoN changed the name of the centre from the DEC to the COLL. The name change indicates an open-ended, broader and more embracing approach by the PoN. As indicated in Chapter 2, page 40, open learning implies the systematic removal of one or more barriers to learning. By accepting an open and lifelong learning approach, the PoN has committed itself to reconsider its admission policies, the way it organises programmes, the place or places where students can pursue them, the choices it will give students as to

the mode or modes by which they will study, and the methods by which they will be supported in their learning.

Where, in the past the PoN determined the conditions under which it would teach, it must now think of its staff as facilitators of other people's learning. In doing this the PoN will need to be attentive to the kinds of support students need to study effectively. The PoN will need to be flexible enough to vary the pace of learning to each students' needs and circumstances and use such forms of assessment as are suitable to their teaching objectives. This will enable the PoN to evaluate student progress towards those objectives while ensuring feedback for immediate and continuous improvement into the teaching system. This approach implies that the PoN will teach in the knowledge that learning is a lifelong process. The open learning approach offers the means whereby all Namibians can develop their potential, contribute to society, advance common values and increase social wealth for the nation.

The ideal of open learning poses great challenges for all at the PoN who are currently involved in distance education. Current education and training arrangements at the PoN are based on a sharp distinction between conventional and distance learning. What is currently called distance education at the PoN is very limited in character, quality and scope and can more accurately be described as correspondence education. Currently it offers no examples of open systems of teaching and learning as indicated in the name change of the COLL and the commitment of the PoN towards open and lifelong learning.

There is still a mistaken perspective that distance and face-to-face teaching are distinct forms of education and training. However, the concept distance education has been defined by the writer in Chapter 2, page 37, as a mode of teaching and learning carried out where the teacher and students are separated in time and

space. The aim of all distance learning is to release learning opportunities from the conventions of classroom teaching and the assumption that classroom educators are a necessary link between teaching and learning. At its core is a conception of learning and how it can be made to happen. Since that conception should animate all teaching and learning, as indicated in Chapter 2, page 37, the processes by which it can be expressed in practice should be applied more widely than in distance education programmes. In this regard the principles of teaching and learning of a well-functioning distance education institution should be the principles of any well-functioning education and training system.

The organisational structure of the COLL was approved as part of the strategic plan of the office of the registrar in December 1999. According to the strategic development plan, the COLL has no mission or vision statement. However, the vision and mission statement and development priorities approved (see Chapter 5, pages 168 - 169) are a step in the right direction. This approach will distinguish between the role of the COLL and the role of the academic schools and departments within the PoN.

Although the new organisational structure for the COLL provides for two separate departments, namely the Department of Open Learning and the Department of Lifelong Learning, neither of these departments have been implemented as yet. Furthermore, as indicated in Chapter 5, page 167, the PoN has established a CTL that will in future take responsibility for all continuous education activities, which include the activities listed under the Department Lifelong Learning. Such a move made the existence of a separate Department Lifelong Learning irrelevant. Job titles of current staff members have been changed, but the same style and approach towards distance education are still in place.

The term "lifelong learning" is highlighted in the name of the COLL. The term "lifelong learning" was adopted by the PoN to indicate the institution's recognition of its involvement in both formal and non-formal educational activities in Namibia. In terms of open and lifelong learning, the writer concludes that the PoN is living up to the basic principle of open and lifelong learning, by providing formal and non-formal education to adult students.

The current management and administrative arrangements have lead the writer to make the following assumptions:

- although there is a clear vision of the rationale, scope and potential impact of distance education within the context of the PoN it is not being fully implemented;
- there is a lack of ability to determine the systems needed to support distance education within a given context, to set up new systems and to evaluate their effectiveness and modify them if necessary; and
- there is a lack of understanding of how distance education works as well as an overview of the planning, resource allocation and promotion tasks required to launch a distance education programme.

The second interrelated micro-management sub-system identified will be evaluated next.

6.7. COURSEWARE DEVELOPMENT SUB-SYSTEM

In distance education teaching responsibilities are usually divided into two phases, namely:

- courseware development, in which courseware is prepared in advance; and
- educating, in which instructional support is provided to students as they are using the courseware.

Courseware development tends to be subdivided further into two aspects, that of providing expertise in the area of instruction, and those of providing subject matter expertise and techniques appropriate to distance education. However, certain competencies are required for both aspects of courseware development, with some specific competencies required for subject matter specialists and instructional design specialists.

The quality of the designed programmes are thus of the first importance, and the development and revision of programmes and courseware are major functions of an institution offering distance education programmes. The institution should ensure that every programme is well-designed, developed and revised regularly to keep abreast of new developments and to incorporate the results of regular analyses in their learning environments.

The functions identified in Chapter 4, page 133, and listed in table 18 relating to the courseware development sub-system will be used to evaluate the current situation at the PoN. Each of the functions will be evaluated in terms of the four criteria as identified in table 25.

Table 29: Distance education functions related to the courseware development sub-system

FUNCTIONS	DOES NOT COMPLY AT ALL	COMPLIES TO A LIMITED EXTENT	COMPLIES SUFFICIENTLY	COMPLIES EXCELLENTLY
Generate ideas for programmes				X
Market research on programmes	X			
Coordinate courseware development process			X	
Devise curriculum and syllabus				X
Write courseware			X	
Edit courseware for content			X	
Edit courseware for appropriate language	X			
Edit courseware for ODL methodology	X			
Lay out of courseware and DTP	X			
Print courseware				X
Store and distribute courseware				X
Devise assessment tools (assignments)				X
Carry out assessment (mark examination scripts)				X
Moderate assessment				X
Award credit				X
Review and evaluate programmes				X

From the above-mentioned evaluation it is obvious that the PoN is not fulfilling all the related courseware development functions, especially functions related to the language editing of courseware, editing courseware for distance education methodologies, the layout and DTP of distance education courseware and no

market research has been carried out in terms of distance education needs and programmes. However, the PoN complies excellently with the following functions:

- generate ideas for programmes;
- devise curriculum and syllabus;
- print courseware;
- store and distribute courseware;
- devise assessment tools (assignments);
- carry out assessment (mark examination scripts);
- moderate assessment; and
- review and evaluate programmes.

Currently within the PoN, the majority of courseware compilers are recruited from the teaching profession, especially from the academic staff of the PoN (see Chapter 5, page 185). Although these educators may be good at face-to-face teaching, they may not be so good at writing for students studying at a distance. During the face-to-face teaching, the educator has ample opportunities to determine whether or not his/her students understand what he/she is teaching and to change his/her style accordingly. The compiler of distance education courseware does not have this opportunity and might go on writing without realising that what he/she has written may not make any sense to his/her students. Mistakes of this nature may only be discovered after students have encountered them and the damage caused by lack of understanding has already occurred. Research has shown that a major part of the failure of distance students at their studies is attributable to misunderstanding caused by ambiguities in courseware.

Sufficient time is not given to compilers of courseware at the PoN to produce distance education courseware. The PoN does this because it is anxious to offer

the courses to students who may be waiting. This approach used in the development of courseware has lead to poor and inappropriate courseware. Currently, the PoN expects its courseware compilers to compile interactive and student friendly study material within less than twelve months (see Chapter 5, page 185). It is also expected from courseware compilers to act as editor, typist and layout and graphic designer, all in one. Due to this arrangement it is obvious that it is impossible to produce courseware that is of a high standard. The PoN does not employ any editors to check on the courseware produced.

The administrative structures of the PoN do not provide for the release of the full time academic staff to work with the graphic designers, instructional designers, content and ODL specialists, video and audio specialists and others to develop a programme for later presentation. Currently the PoN does not employ graphic designers, instructional designers and other specialists to develop a distance education programme. Apart from not having the mentioned specialists, the PoN has no departmental review committees set up to check on courseware developed and produced for distance education. It leaves the checking to the compiler and the moderator, which is not sufficient.

Courseware development is also hampered by the approach that the PoN adopts in the compiling of courseware. The single writer approach rather than the team approach is adopted by the PoN in courseware development (see Chapter 5, page 185). The single writer approach implies that there is one subject specialist responsible for compiling the courseware, which is then moderated by another subject specialist.

The management of the development and production process of courseware depends on much coordination to get all these people working together for a common purpose. In addition, the next step often depends on the work of others,

who may not be on the same premises or in the same town. Therefore good coordination, monitoring and record-keeping are extremely important in the courseware development process. The COLL is currently responsible for the administrative coordination of the courseware development process and therefore complies sufficiently with this function.

Print currently remains the most important medium in distance education at the PoN. Audio cassettes are being used on a limited scale in the teaching of distance education students at the PoN. However, the use of other media will in future change the current approach used towards distance education. As video, audio and computer equipment become simpler and more affordable, it is likely that there will be a trend towards a different working approach in distance education. In the print medium, with the advent of DTP, there are two divergent possibilities:

- print preparation could become a mere exclusive domain, in which content is transformed by media experts; and
- as subject matter experts have increasing access to and facility with computers, they will be able to work along with those with graphic design and computer expertise, to develop a familiarity with the medium and its capabilities .

It appears that new technology and media will play a crucial role in the future development of distance education. If the PoN is not ready to use this challenging opportunity it can become a technologically disadvantaged distance education provider.

The third and last interrelated micro-management sub-system will be evaluated next.

6.8 STUDENT SUPPORT SUB-SYSTEM

A key element identified in the distance education normative model is that the institution providing the education must take responsibility for setting up a system of services that will help the students, who will for the most part be studying on their own. Distance education institutions that run efficient, friendly and effective student support services must spend a large part of their annual budget on such services. Provision of student support services is the main difference between modern distance education and conventional correspondence education. Student support services include a wide variety of systems and activities, from admissions to teaching and learning, and form part of both the administrative and the teaching/learning systems within distance education institutions. Student support is, therefore, an integral part of institutional management and its effective design and maintenance are vital ingredients in institutional and student success. The absence of student support hampers the provision of distance education.

The functions identified in Chapter 4, page 134 and listed in table 19, relating to the student support sub-system will be used to evaluate the current situation at the PoN. Each of the functions will be evaluated in terms of the four identified criteria listed in table 25.

Table 30: Distance education functions related to the student support sub-system

FUNCTION	DOES NOT COMPLY AT ALL	COMPLIES TO A LIMITED EXTENT	COMPLIES SUFFICIENTLY	COMPLIES EXCELLENTLY
Provide guidance on programme choices				X
Provide counselling in relation to studies	X			
Answer student queries in relation to their studies				X
Conduct tutorials		X		
Organise tutorials and vacation schools				X
Provide tutorial support				X
Organise and support study groups	X			
Provide library and study facilities			X	
Train and support students in use of new technologies	X			
Monitor and coordinate student support		X		
Champion and act as advocate for students				X

From the above-mentioned evaluation it is clear that the PoN is currently not engaged in the following student support functions:

- provide counselling in relation to studies;
- organise and support study groups; and
- train and support students in the use of new technologies.

If students are to adapt to the special requirements of guided self-study at a distance they must be supported in the above-mentioned ways. To survive and complete their studies successfully, students must develop appropriate coping skills and strategies. One of the roles of educators and councillors is to assist them to do this. Besides learning from courseware and their educators, students should also be encouraged to learn from each other, and distance education institutions should actively encourage self-study groups amongst enrolled students.

Students need to be supported to a considerable extent by the provision of a range of opportunities for real two way communication through the use of various forms of technology for teaching at a distance, namely, face-to-face contact, assignment marking, mentoring where appropriate, counselling (both remote and face-to-face), and the stimulation of peer support structures .

As indicated in Chapter 5, page 187, the PoN currently offers the following types of student support services to their students:

- marked assignments;
- telephone tuition;
- vacation schools; and
- tutoring at regional UNAM centres.

The writer has already indicated that the standard of compiling courseware at the PoN is low. This situation is exacerbated by equally low standards of educating. Although student support services such as those mentioned above could help to alleviate this situation, they too are unsatisfactory. The major cause of the unsatisfactory nature of educating is the lack of skills in the teaching of distance education students. As in the case of courseware development, this problem is

compounded by scarcity of eligible persons to be employed as educators. Currently the PoN recruits educators from the conventional education system and to a lesser extent from other professions. The major problem experienced is to re-orientate educators from the conventional classroom type education to educate at a distance. Educators at the PoN coming from the conventional education system, tend to transfer the standards and models of face-to-face education to distance education. They tend to assume a lot of knowledge and ability on the part of distance students, which they normally do with residential students. Educators at the PoN also find it difficult to view distance students as individual students rather than a group of students as in the case with residential students in a classroom. Distance education students are part-time students and have other responsibilities apart from learning, and these responsibilities compete among themselves to claim the attention and resources of distance students. Distance students have responsibilities towards their families, employment, learning and leisure and they give priority to them in that order.

All the above-mentioned problems can be ascribed to one basic factor, namely the fact that all educators work for the PoN on a part-time basis (see Chapter 5, page 187). This means that the PoN depends heavily on outsiders for their work, and the institution has neither control over a large proportion of the staff it uses for its work. Educators also become involved in distance education to gain an extra income. Educators are motivated by the extra money received, rather than by seeing their involvement as part of community service and the upliftment of the standard of living of the community.

Besides marked assignments, the PoN, through COLL, has introduced a number of initiatives aimed at addressing the support needs of distance students with a view to enrich their learning experience. To this end the COLL in collaboration with the nine regional UNAM Centres, began a programme to provide for study

resources and academic support for distance education students. One of the key support services launched by the COLL for the academic support of students, is the tutorial support services provided at the nine regional centres (see Chapter 5, page 187). This support service is one of the mechanisms through which the PoN seeks to overcome the barrier of student isolation and improve students' performance by putting the "human face" back into the distance learning process.

Tutorial classes take place during weekends at the regional centres. The role of the educators at the regional centres is to facilitate learning, and not to lecture. However, only certain disciplines of the programmes are currently being offered at the regional centres because of two reasons, namely:

- the number of students enrolled for a specific course does not justify the appointment of an educator. The current policy of the PoN is to appoint an educator if five or more students are registered for a course (subject) at a regional centre; and
- a lack of qualified educators at the regional centres (see Chapter 5, page 187).

One of the critical factors for a successful student support programme for distance education is the availability of a core of local educators who are well-qualified, confident and well-integrated as partners in the total tuition system of the institution. The success of the student support provided at the PoN can be measured in terms of qualitative and quantitative factors.

From a qualitative point of view it should be noted that although this student support programme has been able to attract only a few local educators who are rated highly in terms of academic standards and experience in a few disciplines, they do not demonstrate insight and sensitivity towards the role mapped out as

educators, because they are not fully integrated as partners in the total tuition system of the PoN. Due to a lack of training, educators at the regional centres do not really know what is expected of them.

As far as the quantitative factor is concerned, it is commendable that in the five years of existence, the student support programme has contributed towards developing an integrated delivery system. This practice has lead to an integrated student support system, which is crucial in any distance education programme.

Besides the tutorial classes at the regional centres, the PoN introduced vacation schools (see Chapter 5, page 187). Vacation schools, organised three times per year, take place on the PoN Campus in Windhoek. The purpose of vacation school classes is to:

- provide the students with excellent opportunities to interact with the educator(s) and other students (peers) and gain a better understanding of the courseware; and
- help students to develop the confidence to work independently and to co-operate with other students (peers).

The PoN also makes use of tutorials by telephone (teletuition) as part of its student support services. Teletuition is a kind of tutorial which is initiated by the student who phones the educator when he/she experiences problems. The explanation and advice given during this dialogue amounts to a form of one-on-one tutorial. During teletuition the educator gives counselling and guidance to the student, while the concerned distance student interacts with the counselling and guidance. During the teletuition the distance student also has the opportunity to make personal appointments with educators.

A limitation that has become apparent with regard to these services, is that they tend to be convenient only for students who are able to reach the PoN main campus in Windhoek at their own expense. In addition, the problems with the communication lines and postal services have been known to impose an extra burden on the efficiency of contact between students and educators. At times the Namibian Postal Service has also made it difficult for the courseware to reach their destination on time.

In order to ensure that the student support services are successful at the PoN, it is imperative that all the student support interventions be well integrated into the overall tuition model of the PoN.

6.9. CONCLUSION

The overall performance of the PoN in terms of the interrelated sub-systems of a well-functioning distance education institution will for the purpose of this dissertation be evaluated according to the four identified criteria in table 25.

Tabel.31: Overall evaluation of the Polytechnic of Namibia's involvement in the three interrelated distance education sub-systems

FUNCTION	DOES NOT COMPLY AT ALL	COMPLIES TO A LIMITED EXTENT	COMPLIES SUFFICIENTLY	COMPLIES EXCELLENTLY
Policy-making sub-system				X
Institutional Management sub-system				X
Management and administration sub-system			X	
Courseware development sub-system		X		
Student support sub-system		X		

In terms of the policy-making sub-system, distance education is effectively and efficiently be determined and implemented on national and institutional level. The PoN also complies excellently with the criteria laid down for institutional management. However, in terms of the three interrelated micro-management sub-systems the PoN through the COLL, lacks effective and efficient courseware development and student support functions. However, the PoN's management and administration function as far as distance education is concerned, is sufficient. The writer therefore concludes that the current distance education management model does not address the needs of a distance education provider. Current staffing arrangements at the COLL are not sufficient to fully implement all aspects of the normative distance education model. Due to this arrangement courseware development and student support services cannot be fully implemented.

Although the PoN has accepted a commitment towards open and lifelong learning, this approach has up to the writing of this dissertation in May 2001 not been implemented. The principles and practices of distance education have been adopted by the PoN, but not fully implemented.

The barriers impeding the development of distance education are neither technological nor even pedagogical. The major problems are associated with organisational change, change of educators' roles and change of administrative structures and administration.

The limitations and problems identified will be addressed in the following chapter, which will focus on the conclusions reached as well as the recommendations made by the writer to address these problems.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1. INTRODUCTION

The purpose of this chapter is to make certain conclusions and recommendations based on a comparison and evaluation between the practical application of distance education at the PoN and the normative distance education model.

7.2. CONCLUSIONS

As far as the implementation of a distance education programme by policymakers is concerned, the writer has drawn the following conclusions regarding the setting up of a distance education programme:

- the rationale for the development of a distance education programme and its priority in relation to other options should be clearly spelled out;
- the need for distance education and the appropriate levels of provision, for example, primary, secondary, post-secondary, higher education and non-formal education should be clearly indicated;
- the direct and indirect costs related to investigate distance education provision and the related cost-benefits associated with the implementation of distance education should be known before implementation starts;

- the present status and future requirements of distance education in terms of the present communication infrastructure and technology should be known;
- the capacity for developing and maintaining an effective distance education system in terms of human resources, management capability, the development and production of distance education courseware and the provision of continued student support services should be emphasised, acknowledged and implemented as key principles of a distance education programme;
- distance education qualifications within the national system of educational credentials should be recognised and accepted; and
- there should be possibilities for national, regional, and international collaboration in developing a distance education system.

Conclusions drawn regarding the contents of this dissertation will be categorised and explained in terms of:

- the nature of distance education; and
- the institutional model and management of distance education.

7.2 1. The nature of distance education

People's definitions of distance education are likely to be influenced by the historical background of the programmes with which they are closely associated. This assumption directed the writer to study the historical development of distance education in Chapter 2. In this regard the writer concluded that the historical development of distance education is an important step in developing an understanding of the process of distance education.

The historical development of distance education also made it possible for the writer to identify a number of generations in distance education. The first generation was correspondence education. The second generation was the use of instructional radio and television in distance education. The third generation was a combination of both the first and second generation with various forms and degrees of regularity of face-to-face tuition. The fourth generation, was distance education which included as an essential component the use of computers for computer assisted learning and computer mediated communication as described in Chapter 2, page 58.

The historical development of distance education lead the writer to conclude that the term "distance education" is currently accepted internationally to describe a whole range of educational activities in which teaching and learning take place without the students and the educators being together for all, or even most of the time. This is made possible by the use of media communication in the form of print, broadcasts, audio and video recordings, telephones or computers – and often a combination of several of these, usually in conjunction with occasional face-to-face contact between students and educators or between fellow students.

As the technology has spread, distance education has been offered opportunities to use combinations of communications media to carry the instructions to students. As these choices have become wider, the need to integrate the media used has become greater and often more difficult. Technology is breaking down the traditional distinctions in education, for example, the distinctions between distance education and classroom education are becoming less and less significant.

As the variety and scope of available technology increase, it is possible to see education and training at all levels being practised on a continuum, with

classroom teaching at one end and distance education at the other. In between there is a growing array of methods, and a combination of methods put together to accommodate the different requirements of different students.

This approach emphasises the need for and the ability to deliver openness, which implies open entry, open access, open curricula and open learning methods. Openness, however, is a relative rather than absolute term, and it is by no means a universal characteristic of distance education institutions.

This development allowed the writer to conclude that open learning implies that students should be able to choose from among an array of media and methods of instruction. Such an ideal will allow students to enrol for courses in different modes or from different institutions. This approach makes clear the distinction between open learning and distance education. Therefore, the writer concluded that open learning is an end, which we should be pursuing in order to serve students better. Distance education is the vehicle for achieving this end. The writer is convinced that the term distance education is here to stay or at least that it is an accurate description for the programmes which will predominate as the successors to what today is covered by the term "distance education".

In Chapter 2, pages 42 - 58, the writer identified the most common categories of media used in distance education, namely, print, broadcast and recorded media, computers and face-to-face contact. The writer also identified the advantages and disadvantages of each media. The writer concluded as so many other writers and researchers have concluded before, that, in spite of research, there are no foolproof and theoretically tested guidelines about which media does what best. However, wisdom based on practical experience and applicability of media for a specific situation and combined with administrative and economic considerations

usually determines what combination of media is used in particular circumstances.

The development of distance education in the future will be determined by much larger forces than those confined to education. Distance education is likely to be influenced by events around it and with which it has little connection.

7.2.2. Institutional model and management of distance education institutions

Managing distance education is a complex undertaking. Due to the short history of distance education, educators, managers and administrators have limited experience in managing distance education. The situation is further complicated by the fact that such diverse media are used, each with its own peculiar characteristics, and that the scale of operation is often larger than in conventional institutions. In Chapter 3 distance education institutions were divided into four types:

- dedicated distance education institutions;
- departments of existing institutions;
- consortia; and
- hybrids.

The writer concluded that there is no consensus on a best buy amongst the models described. However, the structure and constitution of a distance education institution will follow from its functions and the activities, which it chooses to undertake or to arrange for other bodies to undertake. In choosing a structure of distance education, the choice will be determined by questions of the

scale on which an institution will work, the nature of the educational needs to be met, the availability of resources, and the degree of autonomy sought.

In Chapter 4 the writer provided a general as opposed to a detailed overview of the kinds of issues that confront managers of distance education programmes. In this regard nine issues that are of particular concern to managers of distance education programmes were identified. All of these issues may also arise for managers of conventional education programmes. However, the emphasis intended here, is on what makes the management of distance education programmes different from the management of conventional programmes.

The writer identified and analysed both the open systems and transactional management framework, and concluded that the transactional framework is embedded in the open systems framework. Based on this conclusion, the writer used the open systems framework as a conceptual framework to develop a normative management model of distance education.

The writer therefore concluded, that the management and organisation of distance education institutions are about making things happen as best and efficiently as possible in difficult and unpredictable circumstances. The writer furthermore concluded that unlike much of what has been done and is being done in conventional institutions, distance education and its methods depend almost entirely on local circumstances. Institutions are therefore responding to situations in which what has been done elsewhere can only be of limited value. Secondly, it is vital to the success of distance education institutions that they remain flexible and innovative in their approach to students' needs, and that they encourage and reward those people and activities that exemplify this approach. Lastly, institutions should never allow themselves to become prisoners of their

own methodologies and plans. Institutions should rather preserve the right, freedom and imagination to respond to existing, as well as emerging needs.

In Chapter 5 the different publicly-funded institutions involved in distance education in Namibia were described. The current distance education model at the PoN was described and evaluated in Chapter 6. In terms of the comparison made between the practical application of distance education at the PoN, and the normative model of distance education management, the writer drew the following conclusions:

- distance education can be a tool of enormous benefit and value for the PoN. However, its potential has only begun to be explored and its use and programme capabilities are still in an early stage of development. Currently within the PoN distance education is by-and-large an additional activity to residential education. This process is driven primarily by the efforts of academic schools and departments that have developed programmes as a matter of initiative or interest. Distance education is still treated as inferior to residential education and therefore remains under utilised;
- the COLL currently forms part of the office of the registrar. The COLL co-operates with other academic schools and departments of the PoN in offering distance education and training to the people of Namibia. While the COLL offers instruction by means of the distance education mode, the residential part of the PoN offers programmes through the conventional face-to-face mode. Both are doing the same work although by different means. This structural arrangement has been exacerbated by the way the PoN itself has placed the COLL in this hierarchy. The COLL is described as one of the academic support units in the same way as the auxiliary services unit is. It is not accorded the same status as the academic

schools or even the departments under them. Unlike members of schools, the head of the COLL is answerable to the registrar who is head of the entire administration of the PoN. This is so because the COLL is regarded more as an administrative unit. Yet the work of distance education is as much academic as the work of any department at the PoN. The fact that a lot of administrative work is entailed in the organisation and management of distance education programmes is not sufficient reason for regarding distance education as less academic;

- a well-functioning distance education programme consists of two interrelated sub-systems on the macro-management level and three interrelated sub-systems on the micro-management level, each with a number of functions to be performed. The normative distance education model identified in Chapter 4, page 136, gives an explanation of these sub-systems and their respective functions. In terms of the two interrelated sub-systems on the macro-management level, functions on both the national and institutional level is clearly defined and implemented;
- functions in terms of the three interrelated sub-systems on micro-management level is not clearly defined and implemented. Due to the current placement of the COLL the focus is mainly on the functions performed as part of the administrative and management sub-system. Due to the fact that the remaining two micro-management sub-systems is non-existent, limited attention is given to the courseware development and student support sub-systems, which will influence the success of the distance education programmes;
- distance education will not grow by the acts of any single agent or interest, because distance education requires co-operation, sharing and the interaction of a vast number of stakeholders involved in distance education;

- although an open learning approach and distance education principles and practices have been identified as part of the vision and mission statement of the COLL, the PoN still applies the old outdated correspondence style and approach; and
- the range of media currently used, namely, printed material and limited use of audio-cassettes, should be expanded to incorporate the latest technological developments in courseware.

In the next section recommendations are made to advance the use and development of distance education across the PoN. The writer also proposes a distance education management model, which reflects the elements of the normative distance education management model, for the PoN.

7.3. RECOMMENDATIONS

The recommendations are focused on overcoming one primary obstacle to the success of a strategic initiative for distance education. This obstacle deals with the need for an enhanced and expanded system of management and infrastructure to support distance education. The following recommendations are also made to advance the development and use of distance education as a central priority within the future planning of the PoN.

7.3 1. Recommendation: The Polytechnic of Namibia charge all academic schools, departments and academic within the PoN to explore encourages and support the development and use of distance education in their future endeavours.

If distance education is to have a qualitative and quantitative impact upon the PoN's future, it must become a method that is applied across the breadth of the

educational research and service activities. This can only be achieved if there is direction from central management who must serve as the principal advocate for distance education through the strategic planning process. A lack of leadership and commitment on behalf of the central management of the PoN will continue to isolate distance education from the mainstream of academic activities. A prerequisite for the PoN is a commitment to recognise distance education as an important part in the strategic planning process.

Distance education activities at the PoN can be elaborated and strengthened by providing administrative support, encouragement and guidance to academic schools and departments in the development and use of distance education programmes. This can be achieved by expanding the duties of those administrators already involved in distance education. The appointment of additional staff members is unavoidable and should be considered as a given. The recognition of distance education as an important factor in the administrative actions of academic schools and departments and administrative departments should include the use and development of distance education as an administrative priority.

The value and importance of distance education will never be realised in the PoN until it is brought into the mainstream of recognised academic activities. Increasing the number of programmes on the distance education mode will ensure an increase in learning opportunities for students and will give the PoN the needed leverage it deserves within Namibia.

7.3 2. Recommendation: That a centre be created and specifically charged with and organised to serve the development and delivery of distance education programmes.

Distance education requires the participation of several partners to create and deliver instruction to students. For most educators within the PoN interested in developing distance education programmes, the process of taking an idea and moving it forward to distance education programme status is time consuming, cumbersome and frustrating. Few educators and administrators know where to begin and how the process should be driven. In order to build a movement towards distance education, the courseware development process must be streamlined, the student support services recognised, and all academic schools and departments within the PoN should be brought into this process as active participants.

Educators and administrators need to know where to take programme proposals and be encouraged to initiate them. Once proposals are made, they need to know that a centre will carry them forward on the distance education mode. Proposals that are advanced need to an advocate who can assemble the necessary contact with educators and bring together the expertise and support required to develop the distance education programmes. Incentives must be built into this process to encourage and promote participation of educators.

Of equal importance to the structures that are needed to facilitate development from proposal to programme is the need to promote, encourage, facilitate, and guide programme initiation and the early development of proposals within the academic schools and departments. Currently, there is little assistance or encouragement for distance education programmes. If distance education is to become a reality, it must begin with individual educators who are inspired by the support and assistance of their schools, departments and colleagues. Commitment is important in the furtherance of distance education goals. If such a commitment to distance education is to become a reality it must be fueled by support and direction from a centralised unit/centre.

From the above-mentioned it is clear that if distance education is to grow and thrive at the PoN, there is a clear need to create an administrative focus for such activities that is able to co-ordinate development and marshal the many diverse services needed to support and advance distance education. The writer does not recommend the creation of a new bureaucratic layer in the PoN but, rather, a re-organisation and reconfiguration of the existing COLL. In this regard the COLL should be taken out of the office of the registrar and should be at par with the academic departments within the PoN. The PoN has restructured its organisation and it makes provision for a Vice-Rector (Academic Affairs and Research) and a Vice-Rector (Administrative Affairs). This new structure is to be implemented as from the 2001 academic year. By virtue of the charge and responsibility of the Vice-Rector (Academic Affairs and Research) over the academic schools and departments the Vice-Rector (Academic Affairs and Research) is the logical person to assume responsibility for such a centre.

The role of the COLL should be to serve as a centre specifically devoted to distance education. The COLL would then become the focal point for distance education activities and bring status, visibility, and credibility to the field of distance education at the PoN.

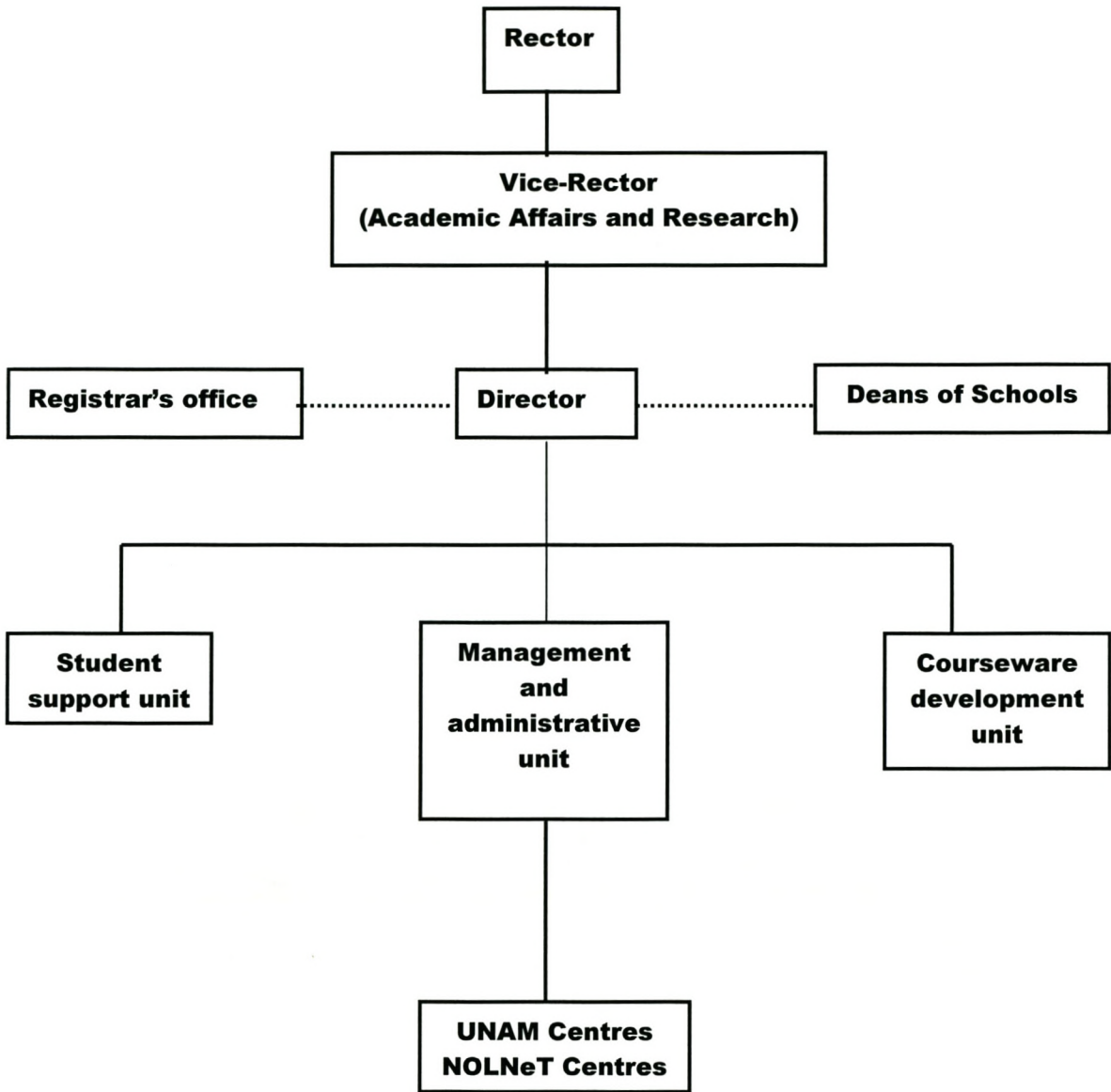
The COLL should be responsible for reviewing distance education proposals generated by the various academic departments and schools within the PoN, and for studying their feasibility in the context of the PoN's mission. The COLL should also be responsible for co-ordinating the various support and management services needed to develop and distribute distance education programmes. The COLL should be charged with bringing the PoN to a position of national and international preeminence in the creation and delivery of educational programmes to a diverse audience through the innovative use of various technologies.

All distance education programmes must follow the PoN standard curricular and programme approval process. Ensuring content quality and evaluating pedagogical objectives rests within the purview of the academic schools and departments.

7.3 3. Recommendation: That the three interrelated micro-management distance education sub-systems as identified in Chapter 4, page 136, namely a management and administrative sub-system, a courseware development sub-system and a student support sub-system be incorporated into the distance education management model for the Polytechnic of Namibia.

As indicated in Chapter 5, page 166, the PoN currently does not operate in terms of the three interrelated sub-systems on micro-management level. The purpose for including these three sub-systems on micro-management level in the distance education management model would be to ensure an effective and efficient distance education system within the PoN. In this regard the writer recommends a new distance education management model for the PoN (see figure 12).

Figure 12: Distance education management model for the Polytechnic of Namibia



This model recommends that the COLL should function independently from the office of the registrar as a separate centre dedicated only to distance education management and organisation within the PoN. This model recommends that to fulfil its vision statement, the COLL no longer be divided into two separate departments, but rather divided into three units on the macro-management level that will deal with the three interrelated distance education sub-systems. As indicated in Chapter 5 page 167, the PoN has restructured its organisation as from January 2001 and it makes provision for a CTL that will take responsibility for continuous education activities. However, there will still be a link between the office of the registrar and the COLL through the director. The office of the registrar is the pulse of a higher education institution, responsible for:

- student recruitment;
- student selection and admission;
- student registration;
- examination administration; and
- student promotion.

The academic responsibility for the offering of distance taught courses will remain with the academic schools and academic departments within the PoN. In this regard there will need to be close cooperation between the director and the deans of the respective academic schools. This arrangement implies a link between the deans of schools and the director of the COLL.

The management model further recommends that the current collaborative approach between the PoN and UNAM regarding the sharing of the nine UNAM regional centres should be retained. This arrangement will ensure a cost-effective delivery of a range of services to all distance education students enrolled at both the PoN and UNAM. Besides this arrangement, the PoN should proceed with the

proposed arrangements to become a partner fully involved in the activities of NOLNeT.

7.3 4. Recommendation: That collaborative efforts be forged between all stakeholders involved in distance education, nationally, regionally and internationally.

The success or failure of any collaborative effort within distance education will depend on the partnership forged between the partners involved. The current collaborative arrangement between the PoN and UNAM, regarding the sharing of regional centres should be encouraged and retained. The PoN's active participation in NOLNeT ensures the PoN's commitment towards collaboration. The purpose of the collaborative efforts through NOLNeT is to contribute to the social and economic advancement of all Namibians by building capacity within the publicly-funded institutions involved in distance education, and by the delivery, through distance education methods of the better quality, more cost effective education and training that is responsive to the needs of diverse groups in Namibia. The benefits of collaboration, for the PoN, will include the following:

- minimising overlap or duplication of programmes and facilities;
- eliminating competition for qualified full and part-time staff ;
- maximising economics of scale;
- making the best use of current existing equipment and infrastructure;
- improving courseware design and production;
- improving student support services;
- enhancing staff development for full and part-time contract staff;
- maximising capacity for research and development; and
- enhancing Namibians perceptions of the value of distance education.

The PoN's involvement in DEASA should be retained. Being part of a regional distance education association provides the PoN with the opportunity to share its distance education experience and expertise with colleagues and distance education providers in the region. The PoN should however, be encouraged to get involved in international distance education associations and organisations. Exposure and involvement in international organisations and associations of distance education will enhance the image of the PoN.

The current collaborative arrangements between the PoN and TSA, regarding the purchasing of courseware material, to enhance the number of programmes offered, should be retained. Not only is this arrangement cost-effective, but there is no need for the PoN to reinvent the wheel as far as the development of new programmes and courseware is concerned. However, the PoN should be encouraged to expand this collaborative arrangement by signing similar agreements with other distance education providers in the region. Purchasing courseware material from other Southern African countries besides South Africa will give a truly "african flavour" to the programmes offered. However, Namibianisation of programmes and courseware should be part of the process.

7.3 5. Recommendation: That the Polytechnic of Namibia treat open learning as the generic policy, while distance education be used to achieve the educational goals of the Polytechnic of Namibia.

The PoN has adopted open learning approaches and distance education principles and practices as key policy instruments for increasing access, and reaching the development priorities as set out in the strategic development plan, Appendix A. To the greatest extent possible, education and training arrangements should be flexible in the choices they offer, and in accommodating the consequences of those choices.

The PoN should open up learning opportunities by overcoming barriers that result from geographical isolation or work commitments, or conventional programmes, which have traditionally prevented students from gaining access to education and training. In this regard the PoN should reconsider its admission policies, the way it organises programmes, the place or places where students can pursue them, the choices it will give students as to the mode or modes by which the students can study, and the methods by which the students will be supported in their learning. These are hallmarks of open learning systems.

The PoN should be attentive to the kinds of support students need to study effectively. The PoN needs to be flexible enough to vary the pace of learning to each students' needs and circumstances. The PoN should also use such forms of assessment as are suitable to its teaching objectives while ensuring feedback for immediate and continuous improvement into the teaching system. This approach implies that the PoN will teach in the knowledge that learning is a lifelong process. The PoN must commit itself to an entirely new approach to distance education in the way it is conceived, provided and managed. Academic schools and departments need encouragement to participate in distance education activities. This encouragement must be clear and compelling. Modest measures will not overcome the institutional inertia that sets in during hard times when people are more concerned with protecting what they have than extending their activities to new and unfamiliar fields. The benefits of involvement and commitment towards distance education must be made clear and unambiguous to the academic schools, departments and educators as examples of the PoN's new priorities.

7.3 6. Recommendation: That the Polytechnic of Namibia commits resources necessary to develop and maintain an evolving technological infrastructure to allow distance education to become a viable, efficient, and effective component in the Polytechnic of Namibia's future.

According to the writer, the success of distance education in the twenty-first century depends on the existence of a technological infrastructure to support and deliver programmes beyond the traditional boundaries of the PoN. The technological infrastructure that will be necessary to do this includes items such as adequate production facilities from which to originate programmes, the technology needed to support and adopt instruction to the distance education environment, the information resources to support these programmes, and the appropriate telecommunication infrastructure. These elements are necessary to deliver programmes to students no matter where they may be.

The writer recommends that those units/departments/centres within the PoN with the knowledge and expertise to forge such an infrastructure be brought together for the purpose of developing a strategic plan that will create the structure needed to serve, enhance, and expand the use of distance education. A consideration of the infrastructure must take into account the realities of constant change and technological breakthroughs and to that end it is recommended that the PoN adopts a strategy of providing adequate funding for the infrastructure to assure that service levels in the future will be commensurate with ongoing technological developments and increased audience demand.

7.4. CONCLUSION

In this chapter certain conclusions were drawn and recommendations made by the writer to enhance distance education at the PoN. The recommendations made in this dissertation are to overcome the limitations identified in Chapter 6. From the recommendations it is clear that the success of distance education operations at the PoN will to a large extent depend on the commitment and dedication shown by all stakeholders to make this process a success. In conclusion, the process of distance education can be described as action orientated, coordinated, inclusive and democratic in nature.

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APPENDIX A

STRATEGIC DEVELOPMENT PLAN FOR THE CENTRE FOR OPEN AND LIFELONG LEARNING

STRATEGIC INITIATIVE

The Polytechnic of Namibia is committed to **integrating technology** into its daily organisational activities, its **teaching and learning**, and its **expansion of access**.

<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
1. To introduce information and communications technologies (ICTs) at regional outreach centres (ROCs) and other centres affiliated to NOLNet.	Assess the need for ICTs at each regional centre.	COLL, in consultation with RASSOs NOLNet	Completed 09/99 Currently updating information on facilities that are already available at ROCs	Needs assessment report available	None
	Secure funding to purchase computers, audio-visual and other equipment.	HRD Project NOLNet COLL to monitor	Already completed	Funds made available	None
	Procure, install and commission equipment and network linkages.	Suppliers, monitored by HRD Project Management, NOLNet, CSB and COLL	Process in already in train. Mid-2001	Computers installed and linked to PoN Server. Other equipment installed and running	Time of CSB and COLL staff.
	Train staff at centres to utilise, manage and carry out basic trouble-shooting and maintenance of equipment.	NOLNet HRD Project Team CSB and DIT COLL to coordinate.	NOLNet Standing Committee for Training and HRD Project Team already making plans for training. May 2001	Training completed. Staff utilising, maintaining and trouble-shooting equipment.	NOLNet will provide most costs for Training. Time of CSB and/or DIT staff.
	Train staff at centres in how to orient and train students in the use of computer and audio-visual equipment	NOLNet HRD Project Team CSB COLL to monitor	May 2001	Training completed. Staff at centres able to provide orientation and training for students.	None
	Staff at centres provide orientation, training and support for students to use ICTs	RASSOs Staff at other centres COLL to monitor	On-going from May 2001	PoN students making use of ICTs at ROCs and other centres.	Staff time for monitoring
	Devise a cost effective system for upkeep, debugging and repair of computers at centres.	NOLNet HRD Project CSB COLL to monitor	May 2001	System in place or contract concluded with service provider.	Staff time and transport, if done in-house, or cost of service contract.

STRATEGIC INITIATIVE :

The Polytechnic of Namibia strives to become a **responsive and flexible tertiary education institution** in the advancement of national economic development; and the PoN continues to expand its international efforts through **partnerships with higher education institutions** and international development agencies in an endeavour to maintain appropriate educational standards, prepare students to work in a global economy and sustain its organisational development.

<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
2. To extend the range of programmes available through open and distance learning to include all courses offered at PoN. Sub-Objective 2.2 Courses for medium- to long-term development <ul style="list-style-type: none"> • ND Traffic Science • Engineering Courses • B. Tech (Policing) 	Gather suggestions for the development of new courses/ programmes and prioritise.	COLL, in consultation with Academic Schools and Departments	March 2002	List of priorities for future development agreed and circulated to all stakeholders	Staff time.
	Carry out feasibility studies for new ODL courses/ programmes, including the number of potential students, an assessment of what is already available in the market, options for obtaining study materials and the relative costs.	COLL, in cooperation with Academic Schools and Departments	August 2002	Feasibility studies completed and forwarded to PoN Management.	Staff time. Consultancy fees?
	Decide which new ODL courses/programmes to proceed with.	PoN Management, Council and Senate	September 2002	Courses/programmes approved for development	
	Negotiate for either: <ul style="list-style-type: none"> • Purchase of rights to existing ODL materials, or • Partnerships with other ODL institutions for joint offerings, where these are viable options. 	COLL, in consultation with Deans of Schools and HoDs	November 2002	Legal agreements concluded	Cost of study materials or participation in joint offerings.
	Convene course development teams where this is the only viable option.	As for previous page	Assume a course development cycle of 18 - 24 months.		
	Repeat activities 2 - 5		Beginning October 2002 and on-going.		

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The Polytechnic of Namibia strives to **become a responsive and flexible tertiary education institution** in the advancement of national economic development.

<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
2. To extend the range of programmes available through open and distance learning to include all courses offered at PoN. Sub-Objective 2.1 Courses for immediate development	<ul style="list-style-type: none"> Identify, appoint and train suitably-qualified persons for writing materials; Convene course development teams (CDTs); Clarify roles and responsibilities; Agree on outline of modules and units; Set intermediate targets. 	COLL to coordinate Deans of Schools and HoDs NOLNet partners	End of February 2001	CDTs appointed, trained and carrying out tasks in accordance with agreed deadlines.	Staff time Training costs
1. ND Marketing 2. ND Accounting 3. ND Public Management 4. ND Human Resource Management 5. ND Vocational Instructor	Draft text for course materials	Course development Teams COLL to coordinate	End of March 2001	Course materials available for editing	
	Edit text for: <ul style="list-style-type: none"> Content Language ODL methods Identify or develop illustrations 	COLL to coordinate Peer Reviewers/Editors Language Editor Methods Editor Course writers and Print Unit	End of July 2001	Course materials available for DTP	Funding, office accommodation and equipment for new post of Coordinating Editor at COLL. Funding for contract staff.
	Secure copyright permission	COLL	End of July 2001	Permission secured	Funding for copyright payments.
	Lay out materials for printing	Print Unit COLL to coordinate	End of September 2001	Course materials ready for printing	
	Draw up assignments, examination papers and/or other assessment tools	HoDs and Academic Staff External Moderators COLL to coordinate	End of September 2001	Assignments available for printing	Funding for contract staff.
	Printing of course materials and assessment tools	Print Unit COLL to coordinate	End of November 2001	New courses launched for 2002 academic year	Printing costs.

STRATEGIC INITIATIVE :

The PoN seeks to **develop and sustain excellence** in teaching in a **learner-centred environment**; and the PoN is committed to **integrating technology** into its daily organisational activities, **its teaching and learning**, and its expansion of access.

<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
3. To improve course materials to encourage active learning.	Identify course materials that require revision.	COLL, in consultation with Lecturers HoDs Deans	January 2001	List of course materials and modules/units that need revision.	Staff time.
Sub-Objective 3.1 Revise existing materials	Identify and train contract staff to revise materials. Set intermediate targets.	COLL, in conjunction with NOLNet Partners	February 2001	Training completed and contract staff working to schedule.	Training costs
	Revise materials in accordance with guidelines	Contract Staff	September 2001	Course materials are more user friendly and interactive.	Payments to contract staff
	Editing, lay out and printing of course materials	As for activities 3, 4, 5 and 7 on page 2.	October 2001	Improved materials available for distribution to learners.	Payments to contract staff
Sub-Objective 3.2 Supply supplementary resource materials.	Identify existing audio-visual (AV) and computer-assisted learning (CAL) materials that may be relevant.	NOLNet Advisory Teams Lecturers	July 2001	Short-list of suggested materials and review copies available.	Short-term consultancy through NOLNet.
	Review AV and CAL materials and make recommendations for supply to centres and/or students.	NOLNet Advisory Teams Lecturers	October 2001	List of recommended AV and CAL materials available.	Staff time
	Procure recommended AV and CAL materials and supply them to centres, and train centre staff in their use.	NOLNet	January 2002	Materials in place at centres and used by students.	NOLNet will pay cost of materials and transport. Training for centre staff may involve some additional cost.

STRATEGIC INITIATIVE :

The PoN seeks to **develop and sustain excellence** in teaching in a learner-centred environment; and the Polytechnic of Namibia strives to **become a responsive and flexible tertiary education institution** in the advancement of national economic development.

<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
4. To set up a programme of orientation, training and development for full-time and part-time staff at both head office and in the regions.	Identify staff training needs: <ul style="list-style-type: none"> Devise questionnaire and distribute to staff; Fill in questionnaire and return Compile results and prepare report. 	HO and Regional Staff	end of May 2001	Questionnaire circulated 95% of questionnaires returned Training needs report available	Staff time Stationery and Photocopying Postage General Office Resources
	Prepare Staff Development Plan: <ul style="list-style-type: none"> Identify and evaluate existing training programmes and resources; Draft outline for training workshops and TOR for trainers; Estimate costs; Propose timeframe. 	COLL, in consultation with HoDs and Deans NOLNet SC-Training	end of June 2001	Draft Staff Development Plan available.	Staff time
	Obtain approval for Plan and allocated resources	PoN Management	July 2001	Plan approved and funds made available.	
	Training of staff through: <ul style="list-style-type: none"> Existing and planned ODL programmes; Participation in workshops organised by NOLNet and/or other bodies; Attendance at training organised by COLL; Other staff development inputs (eg. Mentoring) 	COLL NOLNet Partners External institutions and trainers	Beginning August 2001, but ongoing for period of the plan	Improved performance of staff based upon objective criteria.	Funding for: <ul style="list-style-type: none"> PoN staff to participate in courses run by other institutions; Workshops organised directly by COLL.

STRATEGIC INITIATIVE :

The PoN seeks to **develop and sustain excellence** in teaching in a learner-centred environment; and the PoN continues to expand its international efforts through global partnerships with higher education institutions and international development agencies in an endeavour to **maintain appropriate educational standards**, prepare students to work in a global economy and **sustain its organisational development**.

<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
5. To develop and sustain effective management structures for ODL at the Polytechnic.	Develop a management model for COLL through: <ul style="list-style-type: none"> • Documentary research, • Contacts with other ODL institutions, • Study visits to ODL institutions in SADC (and overseas). 	Registrar COLL NOLNet Advisor	July 2002	Report forwarded to PoN Management, including: <ul style="list-style-type: none"> • evaluation of best practice in ODL institutions; • strategy for implementation at PoN; • detailed cost estimates. 	Staff time International travel within SADC and abroad. Time of NOLNet Advisor.
	Negotiate and approve management model.	PoN Management, Council and Senate	November 2002	Model approved and funds made available.	
	Implement model through: <ul style="list-style-type: none"> • new staff establishment, • appointment of additional staff (if required) • orientation for existing staff, • review of staff performance objectives. 	Registrar COLL staff	March 2003	New establishment (and staff) in place; Existing staff clear about their new roles and responsibilities; New performance targets set for all staff.	Cost of upgrading existing staff or hiring additional staff Staff time

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<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
6. To organise and support self-facilitated study groups among students.	Develop manual for study group leaders.	NOLNet SC - Training, in consultation with: COLL, RASSOs, Tutors	September 2001	Final text of manual ready for DTP	Development costs, including workshopping & editing. Staff time
	Lay out manual and print sufficient copies	NOLNet (possibly PoN Print Unit)	January 2002	Copies of manual available for distribution.	DTP costs Printing costs
	Plan and carry out a training of trainers workshop	NOLNet RASSOs and other regional and HO staff from partner institutions.	October 2001	20 staff members of partner institutions able to train study group leaders.	Training costs (venue, travel, facilitators, materials) Staff time
	Introduce the concept of cooperative learning, break students into groups and select study group leaders	Lecturers, tutors, RASSOs and regional staff from partner institutions.	First meeting with Tutor or RASSO, but no later than March 2002	Study groups formed. At least one leader identified for each study group.	
	Train study group leaders	NOLNet partner institutions at regional level	April 2002	At least one leader trained for each study group	Training costs Staff time
	Study groups meet	Student Leaders Monitored by Tutors, RASSOs and regional staff from partner institutions.	Beginning in April 2002, but ongoing through study period.	Students more satisfied with service. Reduced drop-out rate. Increased participation in tutorials. Improved exam results.	Time of both study group leaders and regional staff.

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The Polytechnic of Namibia is committed to **integrating technology** into its daily organisational activities, its **teaching and learning**, and its expansion of access; the Polytechnic of Namibia strives to become a **responsive and flexible tertiary education institution** in the advancement of national economic development; and the PoN continues to expand its international efforts through **global partnerships with higher education institutions** and international development agencies in an endeavour to **maintain appropriate educational standards**, prepare students to work in a global economy and **sustain its organisational development**.

<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
7. To transfer existing study materials and develop on-line courses.	Consult within PoN community on potential for on-line and computer-assisted learning (CAL).	COLL, in collaboration with CSB PoN Management, Deans, HoDs, Lecturers	end of June 2002	Report on views of stakeholders	Staff time
	Identify and evaluate existing CAL and on-line course materials.	Short-term consultancy and NOLNet Advisory Teams. PoN Lecturers and Tutors	end of July 2002	Report including an assessment of suitability and relevance to PoN courses.	NOLNet will pay consultancy costs. Staff time
	Prepare plans for the introduction of on-line and CAL resources.	COLL (academic components) CSB (technical components)	end of September 2002	Draft plan including: <ul style="list-style-type: none"> • courses to be offered, • sourcing of materials, • technological demands, • staffing and training requirements, • timeframe, • detailed cost estimates. 	Staff time
	Negotiate and obtain approval and funding for plan	PoN Management, Council and Senate	end of December 2002	Plan approved and funding obtained	
	Implement plan	COLL, CSB and other partners	beginning January 2003 for a period of 2 - 3 years	<ul style="list-style-type: none"> • Inter-active CAL and on-line courses available; • Students (both on- and off-campus) making use of resources; • Increased satisfaction among students; • Improved performance and examination results. 	Funds for: <ul style="list-style-type: none"> • computer hardware, • computer software (including adaptation, customisation and commissioning) • staff training, • purchase of copyright, • (additional staff).

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<i>Objective</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timelines</i>	<i>Measurable Outcomes</i>	<i>Resources Required</i>
8. To provide more flexible study options, by reviewing and reducing administrative barriers, including registration period and examination schedule.	Review administrative procedures for COLL students in relation to: <ul style="list-style-type: none"> admission requirements and recognition of prior learning; continuous registration; multiple examination periods throughout the year. 	Office of the Registrar and COLL, in consultation with Deans of Schools, HoDs and PoN Management	April 2002	Report indicating views of stakeholders on alternatives to existing administrative procedures.	Staff time
	Investigate alternative administrative procedures through: <ul style="list-style-type: none"> contact with other ODL institutions, and study visits to institutions in the SADC Region (and overseas). Plan alternatives to existing procedures.	Office of the Registrar and COLL	August 2002	Plan for implementing new procedures, including: <ul style="list-style-type: none"> summary of experience at other institutions; advantages and disadvantages; anticipated problems and how these can be overcome; estimated costs of changeover (if any). 	Staff time. Cost of international travel within the region (and abroad).
	Negotiate and obtain approval for implementation plan.	PoN Management Council Senate	October 2002	Approval granted.	
	Implement plan for changeover to new procedures.	Office of the Registrar and COLL.	January 2003	New procedures in place.	Costs of changeover.